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BOMBAY BRANCH

OF THE

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Musicians Playing the Guitar and Bagpipe.

Cir. 1000 B.C. From a Hittite Slab on the Front of the Dromos at Eyuk.

Photograph presented by Professor John Garstang.

This guitar (overlooked until too late for inclusion in the letterpress) provided with numerous frets and having five small round soundholes on each side of the three or four strings, is being twanged with a plectrum suspended by a broad ribbon. The soundchest with ribs, characteristic of the violin, is clearly indicated. Although this Hittite guitar fully corroborates the evidence offered by the ancient Egyptian guitar (Fig. 171), it in no way affects the theory of the evolution of the mediæval guitar from the kithara of the Greeks of Asia Minor as developed in the illustrations of the Utrecht Psalter. The Egyptian and Hittite guitars are at present isolated examples, divided from the earliest known specimens of the Middle Ages by a gap of some two thousand years or more, during which period pear-shaped instruments with vaulted backs predominated in Egypt, in Asia and in Europe (c.f. Chap. X., The Guitar-fiddle).

THE

INSTRUMENTS OF THE MODERN ORCHESTRA & EARLY RECORDS OF THE PRECURSORS OF THE VIOLIN FAMILY

WITH OVER 500 ILLUSTRATIONS AND PLATES

BY

KATHLEEN SCHLESINGER

In Two Volumes—Vol. II.

Vol. I. Modern Orchestral Instruments.

Vol. II. Archæological Records. Researches into the Remote Origin of the Violin Family; a Bibliography of Music and Archæology English and Foreign) and copious Indices to the two volumes.

LONDON:

WILLIAM REEVES 83 CHARING CROSS ROAD

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OF
THE VIOLIN FAMILY

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[*Forming Vol. II of "The Instruments of the Modern Orchestra and Early Records of the Precursors of the Violin Family."*]

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Plate I.

Ivory Carving from the Binding of the Psalter of Lothair. IXth Century at Armitage-Bridge House.

Photograph presented by the late Sir Thomas Brooke.

THE PRECURSORS OF THE VIOLIN FAMILY.

INTRODUCTORY REMARKS.

Of all the arts, music is by far the most popular and the dearest to man, because her language, that of the soul, is understood by all; she succeeds where all others fail in expressing thoughts, feelings, and longings unutterable in words. We enjoy and prize the orchestra in these days; it cannot, therefore, be without interest to us to look back and see how it was evolved through countless ages, and what it cost of life-long study and energy to bring each family of instruments to its present stage of development.

The want of a comprehensive system of notation, for which tradition made but a poor substitute; and the fact that a proper understanding of many natural laws, sciences, and industries was necessary for the construction of musical instruments, are the circumstances chiefly responsible for the slow growth of music as compared to that of her sister arts; to these must be added the disadvantages of civil and foreign wars and the iconoclastic fury of the fanatics which led them to destroy

invaluable MSS., pictures, and records of music and musical subjects; the chain once broken, the links had to be forged afresh.

With regard to music, each of the great civilizing powers of the world has gone over more or less the same ground, reaching its apogee, declining and falling; the progress of music in each has been observed to vary according to the character of the race, its geographical position, and its internal history. The civilizations with which we are concerned in tracing the precursors of our modern instruments and more especially of the violin family are the Egyptian, Assyrian, Chaldean, Persian, Hindoo, Arab, Greek and Roman; the Chinese and Japanese have had absolutely no influence on the development of our European instruments. The boundary line of historic and pre-historic Egypt has been placed by modern Egyptologists somewhere about 5,000 B.C., and among the earliest records are to be found representations of primitive harps, which argues a high degree of civilization, for the order in which musical instruments have been observed to develop is (1) percussion, (2) wind, (3) strings. Greece, who was chiefly instrumental in introducing the art into Western Europe, owed much of her knowledge of music and musical instruments to Egypt, and still more to Asia.

Her ideals of musical art and of its uses were of the most exalted character; hence the unique position which the art enjoyed, and the numbers of treatises and references to music by the Greeks which are extant. Music, both with Egyptians and Greeks, formed part of the religious rites; it was in request at all festivals, religious, civil, and social.

The origin of musical instruments is wrapped in obscurity, and many are the difficulties in the way of tracing their past history. The earliest sources of information, but by no means the most satisfactory, are sculptured and painted representations of the instruments. Here one is at the mercy of the

artist, who, even at the present day, often sacrifices truth in delineation to artistic fancy; he is seldom a musician as well, and many little details are left out, which to him appear unsightly or insignificant, but which to the antiquarian musician are of the utmost importance. By far the most valuable are the MS. treatises on music and musical instruments, unfortunately few in number.

Relics of the instruments themselves are so few and in such a bad state of preservation that they help but little to fill the numerous gaps in the history of the various families.

Perhaps one of the most serious difficulties in the way of the inquiring antiquarian of the present day is that writers on music have been so often tempted to derive their information from the works of other writers, without going directly to the sources or taking the trouble to verify statements for themselves, thus multiplying errors. Faulty drawings from sculptures and paintings have been propagated in the same way.

CHAPTER I.

The Precursors of the Violin Family.

To trace in detail the history of each of the precursors of our modern instruments would be beyond the scope of this little work, which is intended to set clearly before the reader the various steps in the evolution of these instruments, and the links which are still wanting to complete the chain; further, to interest the reader in the subject and induce him to investigate it more fully himself.

The order in which musical instruments have developed in all civilizations has been observed to be as follows:—

(1.) *Instruments of Percussion.*

(a.) Of indefinite sonorousness such as rude drums, rattles, castanets.

(b.) Of definite musical pitch, ancient cymbals, bells, kettledrums, etc.

(2.) *Wind Instruments.*

(a.) Wood Wind: such as pipes, flutes, shawms.

(b.) Brass wind: trumpets, horns, trombones (sackbuts).

(3.) *Stringed Instruments.*

(a.) Twanged by fingers or plectrum, with open strings: lyres, harps, psalteries, etc.

With stopped strings: guitars, lutes, some crottas, crwths, etc.

(b.) Instruments vibrated by a bow: the rebab, rebec, viol, fithele, guitar fiddle, etc.

(4.) *Keyboard Instruments.*

(a.) With pipes: organs.

(b) With strings: dulcimers, hurdy gurdys, harpsichords, clavichords, pianos, etc.

The origin of the violin family is obscure, and it is only by conjectures, analogies, and inferences that we are able to proceed in tracing the instrument.

But very few relics of these instruments have come down to us: as better models were made, the old ones were destroyed or discarded; the very construction of the instruments in their ruder state was inimical to preservation for any lengthened period. We are obliged to rely on the descriptions of the writers of the middle ages, which unfortunately are meagre and obscure in the extreme.

Stringed instruments were introduced to the nations of Western Europe from two great sources, which, if I mistake not greatly, started from one common fount, Egypt: or was it Assyria?

The Greek civilization and arts were carried by the Romans to Western Europe, including Great Britain, at the beginning of our era, and all musical instruments known in Europe before the beginning of the eighth century, when the Saracens conquered Spain (711 A.D.) and implanted their civilization in the west, must, with few exceptions, have been made known by the Greeks or Romans.

It is after that period that our difficulties commence, for it is well nigh impossible to assign a correct and certain origin to instruments that are known by name only, or at best from the miniatures in illuminated MSS.; from paintings and sculptured representations, many of which are known to have been restored. The reader has already been reminded how untrustworthy these are; Art, besides, was at a low ebb during the first

centuries of the middle ages. We must add to these disadvantages the fact that names of instruments have been applied in different centuries and countries seemingly haphazard to very differently constructed specimens, showing that no well defined laws or models for the manufacture of these instruments existed during the middle ages; it is only when we reach the viol period that we find fundamental laws and unity of design. As treatises on music were all written in Latin during the middle ages, we have not even the names of the instruments in the different languages to guide us in our researches, for the nearest Latin equivalent was used instead.

An important question in the history of the violin is to find out whence came the use of the bow, which is just as much a matter of conjecture as the rest, and to what instruments it was at first applied.

It has been suggested with reason that the absence of the bow in the sculptures and paintings of the ancient Egyptians and Greeks is no proof that it was unknown to them.*

We all know the excruciating effect of a badly-made or handled bow, so that we need not wonder that the crude, early bows (see Fig. 1), if they had them, were not looked upon with favour by nations of such æsthetic tastes as the Greeks and Romans, who had reached such a high development in other arts. They naturally preferred to continue to twang the strings of their favourite instruments, the citharas and lyres, with their fingers, or to pluck or strike them by means of a plectrum.

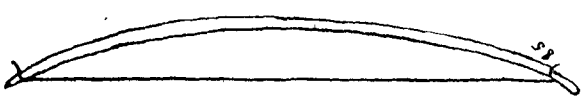


Fig. 1.

Primitive Bow, as used by Hindoos and Arabs with their earliest bowed instruments.

Before beginning to trace the progressive steps in the history

(* Engel, *Researches into the early History of the Violin Family.*)

of the violin, it will be well to glance at the various parts of the modern instrument and bow, in order that we may be able to grasp the various points of resemblance and divergence in the numerous precursors, and to form for ourselves an independent opinion as to the probable ancestry of the violin family.

Beginning at the lower end of the violin (Figs. 2, 3, and 4), we have the volute called the *scroll* (A), with (B) the *cheeks* of the scroll forming the walls of the *peg-box* (C); this scroll is characteristic of the 16th century instruments. The *head*, composed of the scroll and peg-box, must be carefully observed in comparing the different mediæval specimens of stringed instruments, and particularly the manner in which the screws or pegs are inserted in it.

The *pegs* (D), four in number in violins, violas, and violoncellos, three, four, or five in double-basses, serve to tighten or slacken the strings which are wound round them, and are in the precursors sometimes inserted alternately in the sides, sometimes all on one side; in other cases they are to be found on the under side or even on the front of the head.

The *fingerboard* (E), which lies flat on the neck, but stands away from the soundboard, (see Fig. 12), plays a most important part in the development of the violin; by means of it, strings which would otherwise be open as in the lyre can be stopped by the fingers. Fingerboards may have frets as in the modern guitar, but their absence is a proof of higher development, showing that the ear is a sufficient guide in finding the true intonation; frets might be compared to the lines ruled to assist a beginner in keeping his writing straight. What appears to be a fingerboard may be all in one piece with the body of the instrument, then it is simply the neck, as in the rebec (Fig. 6) and gigue (Fig. 7), or it may begin with the neck at the shoulders of the instrument as in many early viols, and fitheles (Fig. 8).

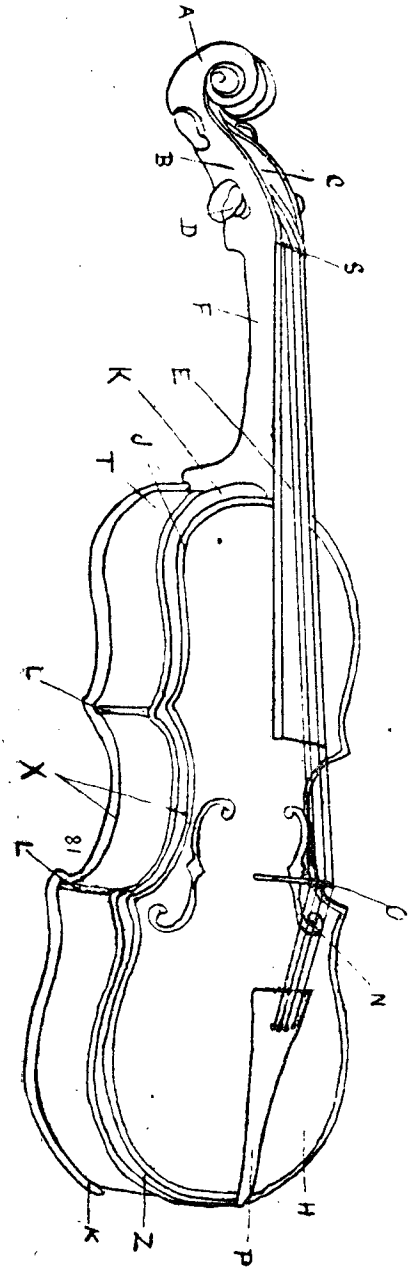


Fig. 2.
The modern Violin.

The *neck* (F) (see diagram of the back view, Fig. 5), which is fastened to the body by means of the *button* (G), supports both the scroll and the fingerboard (notice the adjustment in Fig. 5); it is found of various lengths and widths according to the number and thickness of the strings. Some early rebecs, crowds, rottas and crwths had no neck (Fig. 9), the head was fastened to the shoulders.

The *belly* or *soundboard* (H), forming the uppermost part of the body, is slightly and delicately arched; it is difficult to find out from mediæval drawings of instruments whether the soundboard is arched and how much; if the drawing is in outline, it will appear quite flat (as does my diagram), and if shaded, only a first-rate artist could accurately represent the true arch of the soundboard.

Fig. 6
Rebec.
13th Century
Arundel MS.
157.Brit.Mus.
Latin Psalter
(England.)

The *back* (I) is arched in the violin family and flat in that of the viols; vaulted in the lute and mandoline (Fig. 10), rebec, gigue, crowds and lyres.*

The *purfling* (J) is a delicate little moulding bordering both belly and back of the instrument.

The *edges* (K) project over the sides or ribs, and are called *upper bouts* (Y), round the shoulders; centre *bouts* (X), at the incurvations, and *lower bouts* (Z), from the latter to the tail-pin.

The *corners* (L) are strengthened from within by means of the four corner-blocks, $1\frac{1}{2}$ inches thick, which fill in the corners, and lie closely upon the inside between the soundboard and back; these were not found in any of the precursors except the viol (which differed from the vielle in this respect).

The *ff sound-holes* (N) form the chief distinctive feature of the violin. Readers will notice how various are shapes of the

* These indications of distinctive features accompanying the parts of the violin are preliminary; the subject will be treated more fully further on.

sound-holes, and their number and position in the precursors; this being a point of great importance, more will be said on the subject hereafter.

The *bridge* (O) (see Fig. 11) is again an important feature, and will be observed to be present in some lyres, in most fitheles (when absent in paintings it has probably been

Fig. 7.
Gigue from an ornament on a Chasuble at Sens, 1165A.D. Shaw: "Dresses and Decorations of the Middle Ages."

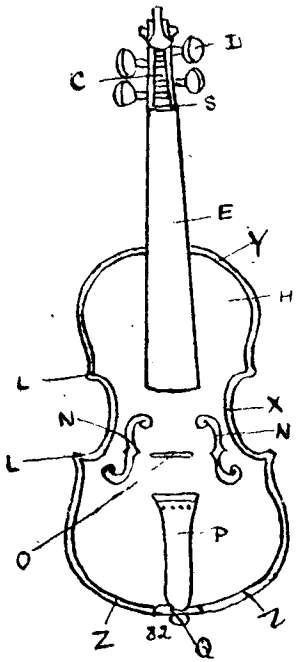


Fig. 3.
The Violin. Front View.

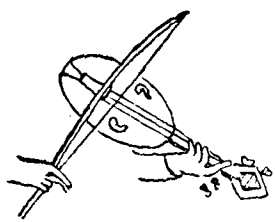


Fig. 8.
Vielle or Fiddle, 14th Century. Brit. Mus. Add. MS. 27695. From a "Treatise on Virtues and Vices," by a Genoese.

overlooked by the artist). The use of the bridge is to transmit to the soundboard the vibrations of the strings, and to raise the latter into a convenient position for bowing or twanging; bridges are accordingly flat or arched.

The *tail-piece* (P) is pierced with sufficient holes to receive the strings; in the precursors, these tail-pieces varied very greatly in shape, length, and position (see Figs. 7, 8, 12), and in

some specimens even appear to have been absent altogether, while in others, curiously enough, the delineator seems to have

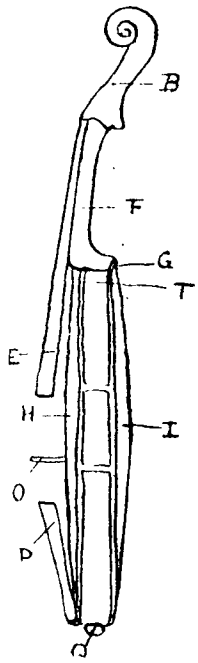


Fig. 4.
The Violin. Side View.

Fig. 9.
Rebec. 14th Century. Brit. Mus. Add. MS. 17333.

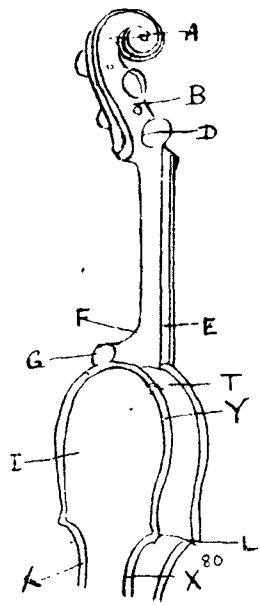


Fig. 5.
The Violin. Back View.

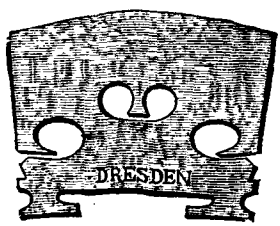


Fig 11.
Modern Violin Bridge.

represented the tail-piece in the middle of the soundboard (Fig. 9).

The *tail-pin* with the *rest* (Q) is the kind of button to which

the tail-piece is attached by means of a loop made from a gut string (generally a D tenor or viola string), which the ebony

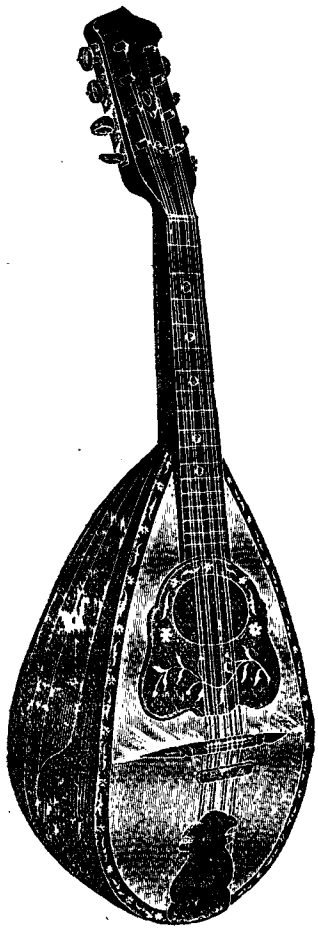


Fig. 10.
Modern Mandoline.

rest supports at the edges of the violin, thus protecting them, and preventing the rubbing or chafing that would otherwise result from the tension of the loop.

The *nut* (S) is a small strip of ebony which forms a little bridge between the peg-box and the fingerboard, and is pro-

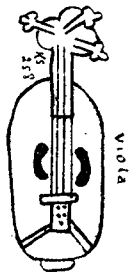


Fig. 12.
"Viola," 14th cent. Sloane MS. 3983, Brit. Mus.

vided with small grooves to receive the strings and raise them clear of the fingerboard. The shoulder (T) is the base of the neck where it fits on to the body of the violin round the button (G), which is cut in one piece with the back and not added.

CHAPTER II.

The Question of the Origin of the Violin.

ON this subject there have been many and diverse opinions at all times; on account of the prominence of the violin in the orchestra, and the favour it justly enjoys amongst musicians and amateurs, those opinions must ever form an interesting literature; since, even should the conclusions arrived at by the different writers not be in accordance with our own, many important facts and details are thus brought to our notice.

Two principal and diametrically opposed theories exist on this subject at the present day: the first derives the violin from the Greek lyre (Fig. 13) through the intermediary of the monochord and its successor the tromba-marina, the crwth, crowd, viol, and violin, leaving the Moorish rebab out of the question.

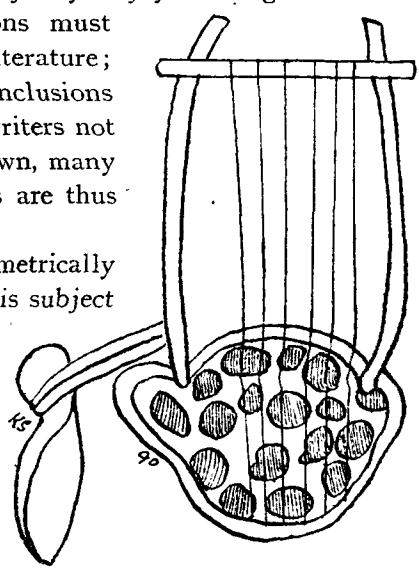
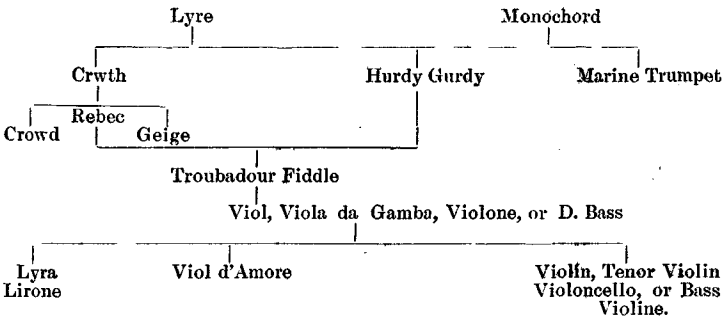


Fig. 13.
Chelys Testudo or Tortoise) Lyre, 15th cent. B.C.
3rd Vase Room. Case 31, E 191. Brit. Mus.

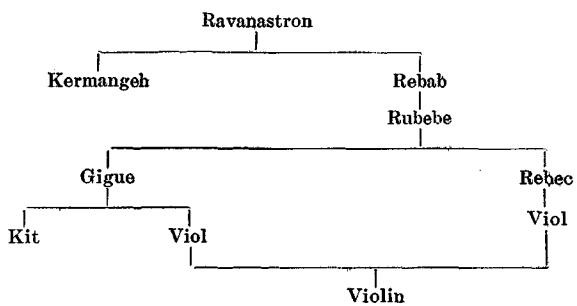
This theory may aptly be represented by the following genealogical table.*

GENEALOGICAL TABLE OF THE VIOLIN.



The second theory derives the violin from the East through the Moorish rebab introduced into Spain in the eighth century; this descent can be aptly represented by Mr. Edward Heron-Allen's genealogy of the violin.†

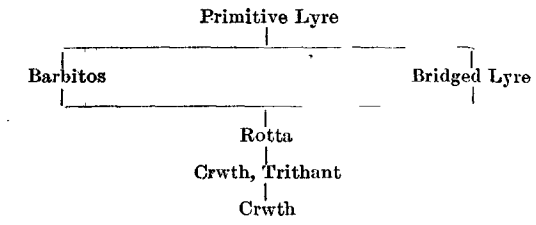
GENEALOGY OF THE VIOLIN.



* Copied from Mr. E. J. Payne's article on the violin in Grove's *Dictionary of Music and Musicians.*

† *Violin Making as it was and is.*

GENEALOGY OF THE CRWTH.

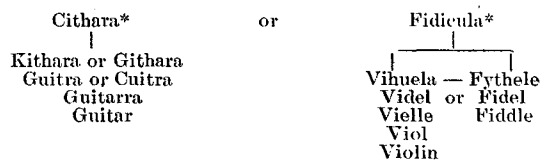


After mentioning these opinions, it is with diffidence that I venture to set forth the conclusions at which I have arrived after careful investigation and consideration of the point in question, taking no statement on trust, but going when possible to the original sources for information.

These conclusions rest upon two main points:

(1) The shape of the sound chest of the violin: shallow with ribs connecting the front and back resonating tables, which is also characteristic of the Asiatic kithara, the Greek cithara, the guitar of troubadour fiddle, and the vielle of the Middle Ages; and of the viol.

(2) The derivation of all these names from the cithara, *i.e.*



(* See San Isidore's "Etymologiarum," Lib. III., Cap. 21.)

The bow first of all, whose history has been considered to be identical with that of the violin, was undoubtedly, judging from the best evidence we possess, (see Chapter III. on Plectrum and Bow) first introduced to the Western Civilization from the East, at what date is uncertain, but possibly by the Moors in the 8th Century. Although the bow was probably first used in Europe with the rebab (Fig. 14) it was applied to many other instruments formerly twanged either by

the fingers or with a plectrum, and that *before* the immediate descendants of the rebab—the rebec and the gigue—had attained to any development which could bring them into touch with the violin. What is it that constitutes the distinctive and most important characteristic of the violin? Some will say *the bow*, because of the increased beauty of tone which it gives, and of the legato style and variety of expression which it makes possible. But if that be the case, why not have been content to use the bow on the vielle, or even on the rebab?

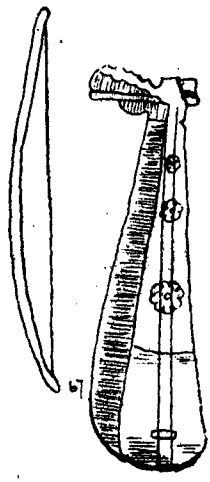


Fig 14.
Moorish Rebab, Ancient and Modern.

It seems to me that by far the most important feature of the violin is the shape and construction of its *soundchest*, which alone places it far above all other stringed instruments, as would be seen if we compared its pizzicato and legato with those of the rebec and Moorish rebab.

What was the verdict of the middle ages with regard to those two classes of bowed, stringed instruments, *i.e.*, that with vaulted soundchest and no ribs, represented by the rebec (Fig. 15) and gigue; and that with parallel soundboard and back connected by ribs, represented by the vielles (Fig. 16) or viols and guitar-fiddles? In France, there was actually an edict forbidding the use of viols (or vielles) in taverns and low places on acount of the superiority of the instrument and of its use by the best musicians, but on the other hand permitting that of the rebec—which was despised by musicians of culture.

We have in all countries evidences of the sharp, disagreeable tone of the rebec; its place in the musical world was always a low one.

"El ravè (rebab or rebec) gritador con su alta nota" ("The shrill rebec with its high note." This line occurs in a Spanish poem written in 1330 by Jean Ruiz, archipreste de Hita, in an enumeration of the musical instruments used in his day.

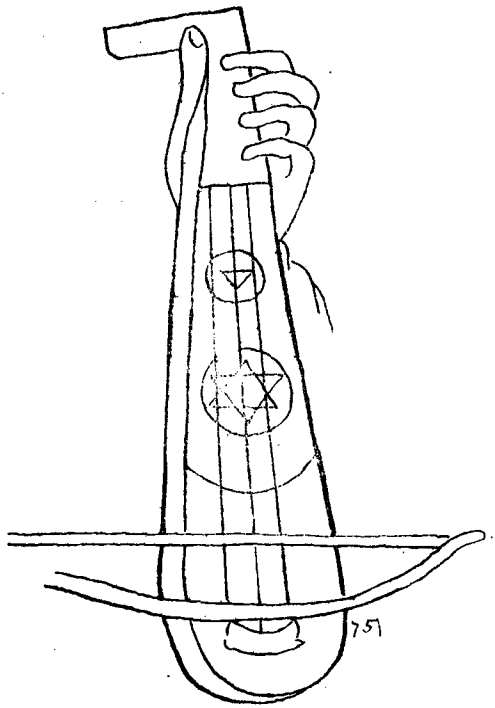


Fig. 15.

Rebec. Spain, 14th century. From an Altar Piece. Real Academia de la Historia, Madrid.

(see p. 26). This is said of the instrument 600 years after its introduction to Western Europe, during which time very little development is observable.

Leaving the bow aside, then, in determining the ancestry of the violin, since it was applied equally to many instruments which before were twanged,

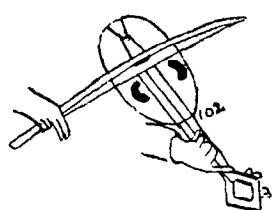


Fig. 16

Vielle or Fiddle, 14th century. Add. MS. 27695. Brit. Mus. From a "Treatise on Virtues and Vices," by a Genoese.

such as crowds, rottas, crwths and guitars, we must consider which of the instruments of the ancients possessed in the greatest degree the characteristics of the violin.

The soundchest, as has been before said, is the most important of all characteristics, and there are two great classes of sound-chests to be found in stringed instruments: Firstly, the simplest and earliest form, having a vaulted back which, in primitive instruments, was cut out of a single block of wood, to which the soundboard of skin or wood was glued. Secondly, the soundchest composed of two parallel, flat or only very slightly arched, resonating tables, *joined by sides of equal width called ribs.* This type of soundchest was originally made in one piece in the ancient Kitharas. (See Fig. 165 and explanation in Chap. IX.)

Among the most ancient stringed instruments known in any civilization (the antiquity of the Ravanastron (Fig. 17), it must be remembered, is only *traditional,* and absolutely unproved) are the lyres, which have existed from the earliest ages in various shapes and sizes, furnished with a variable number of strings, and designated by many different names.

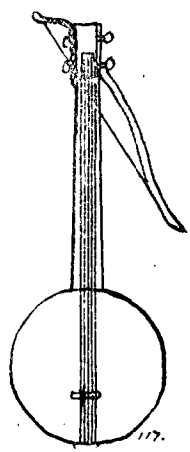


Fig. 17.
Hindoo Ravanastron. Sonnerat, "Voyages aux Indes Orientales." Vol. I.

The primitive lyre—*chelys* in Greek (Fig. 13 and 18) and *testudo* in Latin—was originally made from the shell of a tortoise, over which was glued a soundboard of parchment or wood, forming a concave or vaulted soundchest.

The *cithara* or kithara (Fig. 19) preserved the general characteristic of the above, but its construction showed a great advance; the soundchest here consisted of two parallel tables joined by sides or ribs of uniform width.

In these two classes of instruments were to be found in addition at their apogee: bridge (Figs. 19 and 20), soundholes, tail-piece, pegs (Fig. 21), or their equivalent, purflings (Fig. 22), and perhaps fingerboard—all, as will be observed, features of the violin of sufficient importance to warrant our following the trail.

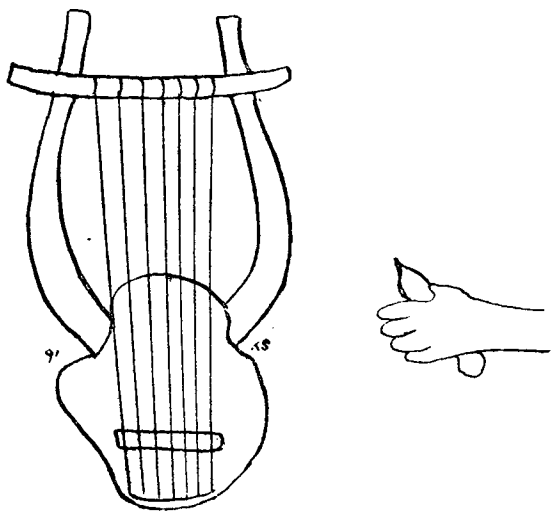


Fig. 18.
Chelys Lyre. 5th Century B.C. Brit. Mus. 3rd Vase Room, E 374.

Of these two, the cithara (Fig. 23) we know was of Asiatic origin; its name exists still in Chaldee, *chetarah* or *ketharah;* in Arabic, *kithara;* in Nubia, it is *kissar;* delineations of it have been found in Assyria, and Strabo, the historian and geographer (born B.C. 63), says that authors constantly quote the "Asiatic kithara."

Centuries later we find in Europe, among the precursors of the violin, two classes of instruments corresponding to the lyre and cithara in their characteristic soundchest, and *both played with the bow.*

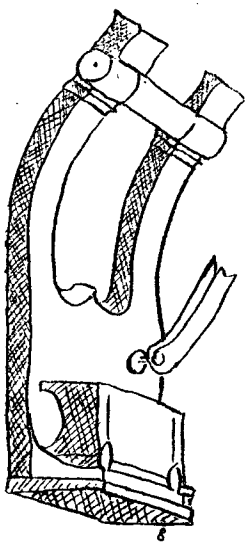


Fig. 19.
Cithara. From a Greek Vase. Thos. Hope: "Costumes of the Ancients," Vol. II., p. 192.

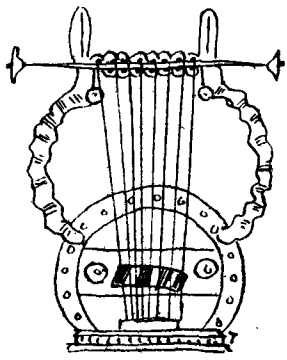


Fig. 20.
Bridged Lyre—with soundholes, tail-piece, and ring contrivance for tightening the strings over the cross-bar. Thos. Hope: "Costumes of the Ancients," Vol. II., p. 209. (From a Greek Vase.)

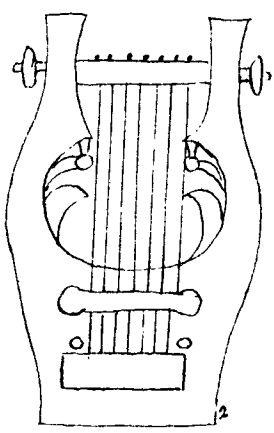


Fig. 21.
Cithara with pegs, bridge, soundholes and tail-piece. Thos. Hope: "Costumes of the Ancients," Vol. I., p. 113. Found at Herculaneum

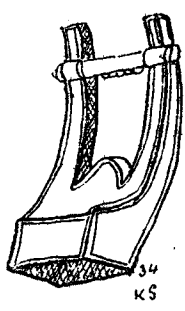


Fig. 22.
Cithara showing purflings and pegs. Rome Museo. Capitolano. Clarac: Tom. III., Pl. 490.

(1.) The *Vaulted soundchest, without ribs,* like a vertical section of half a pear—such as the rebab, rebec (Fig. 15), gigue, crwth, etc.

(2.) The *Shallow soundchest, with ribs*—like the guitar-fiddle (Fig. 16) or vielle.

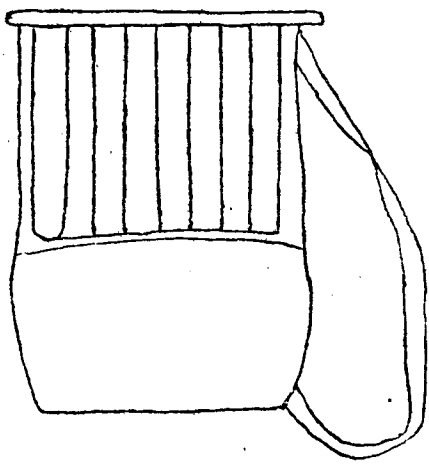


Fig. 23.
Primitive Asiatic Ketharah, Botta: "Monuments de Ninive," Vol. II, Pl. 162.

The question is, where did these instruments (found in delineations of the 11th Century) come from, and how were they evolved?

* * * * *

The cithara was as great a favourite among the Romans as it had been among the Greeks. Traces of it, as well as of the chelys lyre, are to be found in all countries that have at any time fallen under the denomination of the Romans; therefore instruments with vaulted and shallow soundchests found their way to the various countries of Europe *before* the conquest

of Spain by the Moors, and there developed in due course of time.

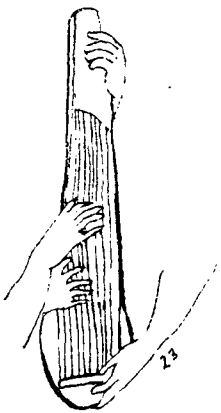


Fig. 24.

Roman Instrument of the Rebab and Lyre type (lyre in transition) played by two girls. Clarac: "Musée du Louvre. No. 261, Vol. I., Pl. 202.

Let us consider, then, what is known of stringed instruments in Europe before 711 A.D. Besides the various kinds of lyres and citharas, the Romans knew of the instrument represented in Fig. 24, of which there are three independent delineations in sculpture extant, two being in the Louvre and one at Girgenti. (See Fig. 108.)

Mr. Carl Engel, in his *Early History of the Violin Family*, p. 112, gives an illustration of the two women playing these curious instruments, that forms part of the sculpture on a Sarcophagus.*

This is an instrument of the rebab class, boat-shaped, with vaulted back, and eight or nine strings; a sort of compromise between the lyre and rebab, it betrays oriental influence.

The Romans have also left us sculptured representations of an instrument shown in Fig. 25, probably the pandoura, developed from the tamboura of the Assyrians or the nefer of the Egyptians, but having four pegs set in the back of the head in oriental fashion.

The author was enabled by the kindness of the late Mr. A. S. Murray, of the British Museum, to find the instrument de-

* Found among the ruins of Agrigente in Sicily, and now preserved in the Cathedral of Girgenti—of which a cast may be seen in the Sepulchral Basement of the British Museum, by applying to the authorities for permission.

picted in Fig. 25, and to sketch it from a bas-relief illustrating a scene from the myth of Eros and Psyche; this sculpture is thought to date from the reign of the Emperor Hadrian (A.D.

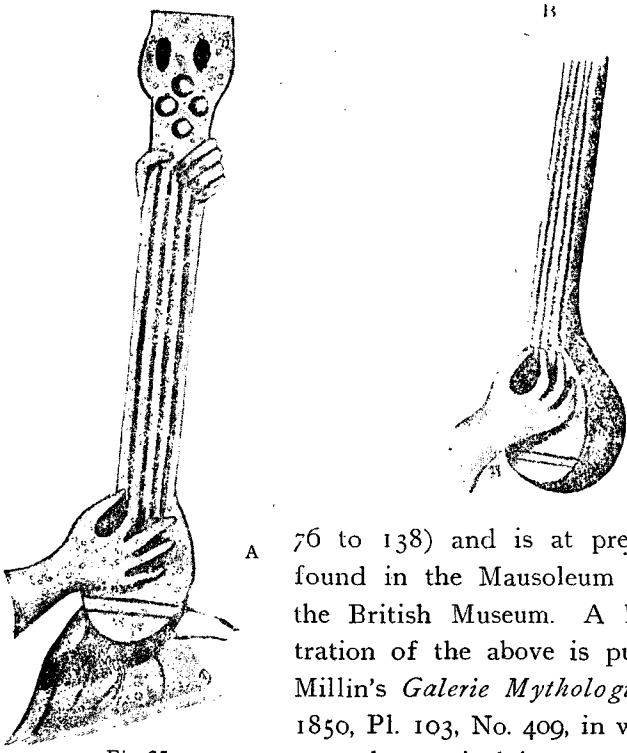


Fig 25.

A. Pandoura or Tamboura, with four pegs inserted from the back of the head, in Oriental fashion, the strings being drawn through holes in the neck and wound round the pegs. B. Side view of the instrument showing the vaulted back.

76 to 138) and is at present to be found in the Mausoleum Annexe at the British Museum. A little illustration of the above is published in Millin's *Galerie Mythologique*, Paris, 1850, Pl. 103, No. 409, in which, however, the musical instruments are not correctly drawn.

Further, I find an instrument of the lute tribe (Figs. 27 and 27A) in profile with three pegs inserted in the front of the head; all these instruments have counterparts or prototypes among Asiatic instruments, from which they were unquestionably derived at some time or other; and they have vaulted soundchests with a varying number of strings

twanged by the fingers or with the plectrum. So far, I have not been able to trace a European instrument of the kithara class, showing a corresponding degree of development at that period, *i.e.*, the 2nd or 3rd century A.D., although I have reason to believe that such existed and were known in Spain before the invasion of the Visigoths in the 5th century A.D.

Fig. 26.

Cithara and Lyre (in transition) from a bas-relief in the Louvre. No. 656. Clarac: "Musée de Sculpture," Vol. II., Pl. 119. Paris, 1826.

This bas-relief has been drawn by various artists with variations; the instruments in this copy seem more carefully drawn than in the others, but the lute is incorrect (see Fig. 108.) M. de Clarac declares the subject (of which Fig. 26 is only part) to represent Apollo and three muses (see Figs. 107 and 108.)

In the article on Egyptian Music (Aegyptische Musik) in Mendel's *Musikalisches Conversation's Lexikon*, Vol. 11, p. 50, is depicted an Egyptian guitar with a waist, four soundholes, four strings, and a fingerboard; the head is bent back as in the lute family, and four pegs are inserted in it laterally.

Mendel assigns it a date between 1,700 and 1,200 B.C., but does not give his authority.*

Fig. 27. Instrument of the Lute type found at Herculaneum. Thos. Hope: "Costumes of the Ancients," Vol. I., p. 78.

Before proceeding further, where does the word *guitar* come from? In mediæval Arabic it is cuitra or cuitara (see *Vocabulario Español-Arabigo*, Tanger, 1892); it is the Kithara of modern Arabic, which I am told is to this day pronounced "githara" (with a hard "g" and the "th" as in theme) by the Arabs of North Africa, the very region from which the Moors of Spain issued. No doubt, an instrument similar to the Egyptian guitar mentioned above must have been introduced to the Spaniards by this name in the 8th century, since we find representations of it in a highly developed state in illuminated MSS. of the 13th and other centuries (see Figs. 28 and 29).

A poem by Juan Ruiz, the Archipreste de Hita, written in the 14th century, contains an enumeration of musical instruments alluded to at the beginning of this chapter, in which these lines occur:

> "Alli salian gritando, la *Guitarra Moris a*,
> De las voces agudas è de los puntos arisca
> El *corpudo laud* (lute) que tiene punto à la trisca,
> La *Guitarra Latina* con estos se aprisca
> El ravè gritador," &c.

From this, we gather that the Moorish guitar, like the *ravè* or *rebab*, had a shrill and harsh tone; from which we may infer that as there was likewise a Latin guitar, which is not spoken of in a disparaging manner, it is to that one, rather than the Moorish instrument, that our European guitars are akin.

* It is probably the instrument shown in Fig. 171.

Plate II. (Fig. 27A).

SHOWING HYDRAULIC ORGAN, PANDOURA AND KITHARA, EARLY CHRISTIAN. FROM THE MUSEUM AT ARLES.

When the Moors introduced their improved Kithara or Githara into Spain, they found that the inhabitants already had a similar instrument obtained from the Romans, which, to distinguish it from that of the Moors, was then called the *Latin Guitar.* It is probable that the "Guitarra Latina" was at first twanged by the means of the fingers or plectrum, and that later, when the bow was applied to other stringed instruments such as the crotta, it was also used for the guitar, which we thenceforth designate as the *guitar-fiddle.*

Fig. 28

Moorish Guitar. 13th Century, from the "Cantigas de Santa Maria," in the Escorial Library. (J. b. 2.)

Figures 28 and 29 are two of the 51 figures of instrumentalists from the beautiful Spanish MS. known as the "Cantigas de Santa Maria" in the Escorial Library (J. b.2.) This MS. dates from the second half of the 13th century, and was compiled by King Alphonso the Wise. It consists of a collection of poems on devotional subjects, in Galician dialect, dedicated to the Virgin Mary, and set to music on five-line stave. There are three distinct copies of the MS., all slightly different, one at the Bibl. Nac., Madrid, which formerly belonged to the Cathedral of Toledo, and two at the Escorial, which came from Seville Cathedral. I have obtained my drawings through the kindness of Mr. T. L. Southgate. The whole collection is to be seen in *Critical and Bibliographical Notes on Early Spanish Music*, by Juan F. Riaño, published by Quaritch. A facsimile in colours of part of the Cantigas (J.

b. 2) can be seen at the British Museum—"Academia, Madrid." Real Academia Esp. Cantigas de Santa Maria. Facsimile of MS. (Madrid, 1889, quarto 1872, c. 18.)

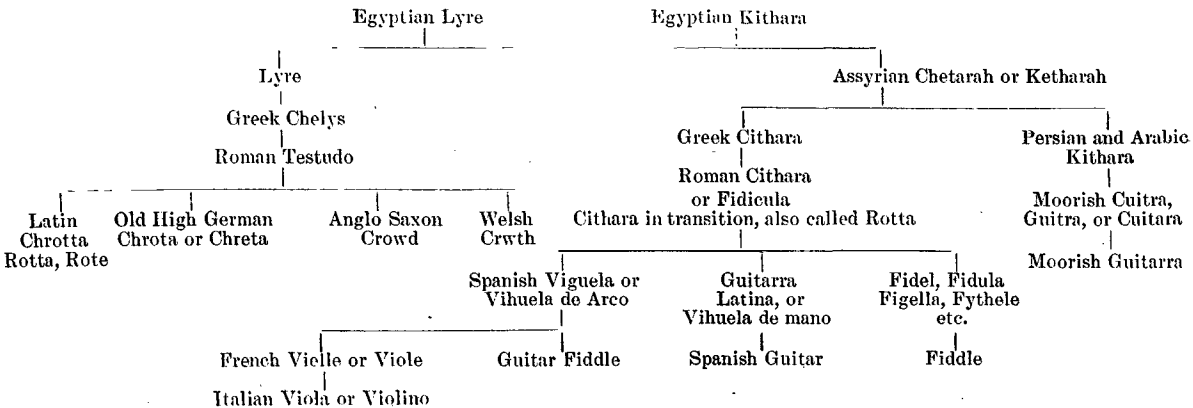
Fig. 29.
Guitar, 13th century, from the same MS. as Fig. 28.

Fig. 28 represents a Moor with an instrument, possibly the 14th century *Guitarra Morisca* of the poem quoted above, since the tail-piece is crescent-shaped, and has the Oriental rose soundhole of the Arab lute, but in outline the Moor's instrument is strongly reminiscent of the ancient Egyptian nefer. See Fig. 31 and 32.

Fig. 29 may be the "Guitarra Latina" of the same poem, for as the head is in the shape of a grotesque animal-head, it could not be Moorish, the Arabs being forbidden by their religion to portray living objects.

We learn, moreover, from quotations given in *Historia de la Musica Española*, by Soriano Fuertes, vol. IV., chap. XXVIII., pp. 195 to 217, that the most distinguished Spanish antiquarians and musicians believe the guitarra latina to have been originally the Roman *Fidicula*, and that the Spaniards called it later vigola and vihuela (a corruption of Fidicula), words which were in use in the 14th century, and are to be found in the enumeration of the Archipreste de Hita (quoted in the above mentioned work by Fuertes), accompanied by the distinguishing terms "de mano" (hand) and "de arco" (bow), which were no doubt added when the bow was applied to the instrument.

GENEALOGICAL TABLE OF THE FIDDLE OR VIOLIN.*



Compiled by the Author.

On investigating the Spanish sources, I find in the *Etymologiarium*, Lib. III. Cap. 21, by San Isidore, an archbishop of Seville who lived in the 7th century, the following words:

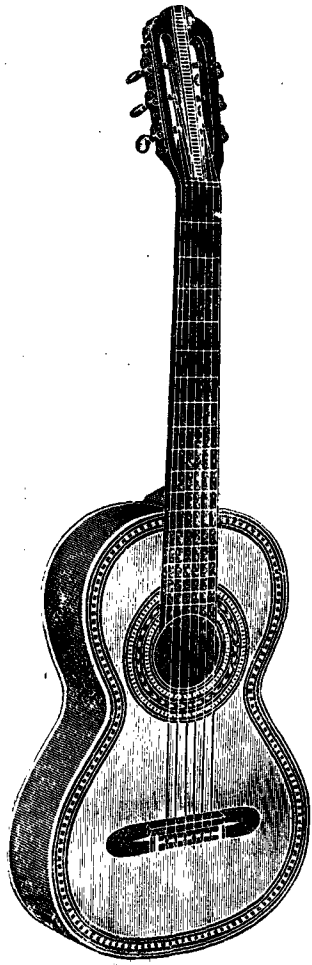


Fig. 30.
Modern Guitar.

"Veteres aut citharas fidicula vel fidice nominaverunt." Here at last is reliable evidence as to that much disputed instrument

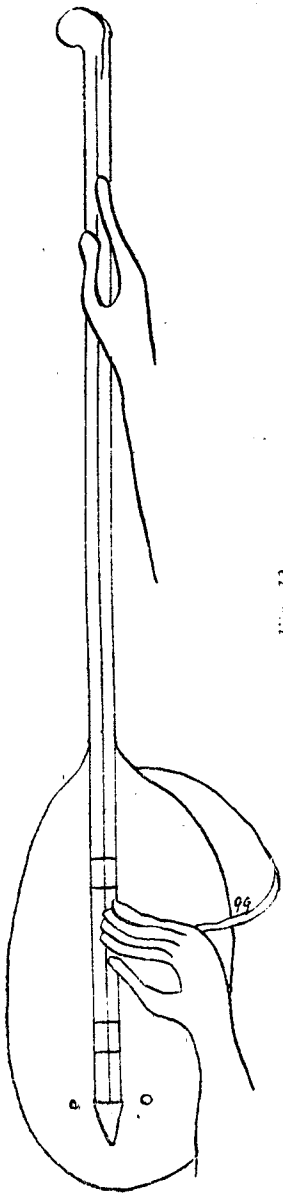


Fig. 32.

Nefer or Tambourá. From Thebes.—Kcurna. Champollion: "Monuments de l'Egypte et de la Nubie." Tom. II., Pl. 154.
(The artist has given the performer two right hands.

the fidicula, by one who lived not too long after the Romans to be able to give a trustworthy account of their instrument: it was simply the cithara. Therefore the above Spanish authors were quite right in their surmise; the guitarra latina *was* the fidicula (since guitarra is a corruption of cithara), and it was known in the middle ages as vihuela *de arco* or vihuela *de mano*. The same fidicula became in Northern countries *fidel* and *fythele*, and the very names fiddle, vielle, viol, and violin, in their etymological history, which is identical, conclusively reveal the ancestry of the violin.

Thus we see that the Spanish guitar of the present day (Fig. 30) is the lineal descendant of the ancient ketharah of the East (Fig. 23); that in its development, its history and that of the violin are identical, until the moment when the bow was applied to it, then their paths diverge; the guitar, which was never bowed by the Moors, retaining its name and characteristic of being twanged by the fingers; the other, the progressive, European guitar played with a bow, was called by the various derivatives of the Latin *Fides*, a string, and Fidicula, an instrument mentioned by the ancients (*see* Cicero *De Natura Deorum*, II., 8, 22) as being made of plane wood (maple) and having several strings.

As to the derivatives, their name is legion; in the south, the *f* was softened to *v*, and the vowels became sonorous; appended are a few of them—

Latin	fidicula or fides
Mediæval Latin	vitula
Late Latin	figella, fitola
French	viele, vielle, viole
Spanish	viguela, vihuela, vigola
Old High German	fidula
Middle High German	videle
German	fiedel, violine, geige
Anglo-Saxon	fithele, fythele

English	fiddle, violin
Italian	viola, violino
Norwegian	fidla, fiol

The monochord has been numbered by some amongst the antecedents of the violin; it has been said that to it we owe the resonant box with its soundholes, the fingerboard and the movable bridge which gave the idea of stopping the strings by means of the fingers. The invention of the monochord has been ascribed to Pythagoras in the 6th century B.C., but as he spent many years in Egypt studying, he probably is indebted to that country for the idea of dividing the string to obtain different sounds by stopping it with the fingers; for in Egypt a kind of lute called nefer (see Figs. 21 and 32) was known more than 3,000 years B.C., in which the divisions of the strings were marked on the finger-board by means of frets of gut. There are numerous illustrations of these tambouras or nefers in Egyptian pictures and sculptures, and they differ greatly from one another, some having vaulted soundchests and others shallow soundchests with ribs. A nefer with frets can be seen in the British Museum in a fragment of painting from a tomb on the Western Hills, Thebes—XVIIIth to XIXth Dynasty.

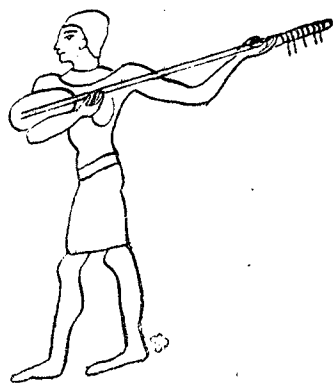


Fig. 31.

Egyptian Nefer or Tamboura. From a painting on a tomb at Thebes. Sir Gardner Wilkinson. "Manners and Customs of Ancient Egyptians." Vol. I.

As to the soundchest of the violin being derived from that of the monochord, the hypothesis appears to me very doubtful. I have not yet come across a drawing or sculptured representation of the Greek monochord (the mediæval are outside the subject entirely); whereas the cithara was a much

older instrument than the monochord, and we are familiar with all the varieties of this instrument, which was so constantly depicted by the Greeks, and so intimately associated with them in their social life.

Again, the soundholes were present also in this ancient tamboura (see Fig. 32), so that it does not seem that we need take the monochord into consideration at all in determining the ancestry of the violin, since it possessed no characteristic feature not already known in much older instruments.

As to the crwth, crowd, rotta, chrotta, etc., its characteristics seem to have been a vaulted back (less vaulted than that of the lute), and a hole cut through the soundchest of the instrument at the upper end, to admit of the hand passing through to stop the strings (see Fig. 33.)

The crwth family is apparently descended from the chelys or testudo lyre with the vaulted back. Mr. Carl Engel in his *Researches into the Early History of the Violin Family* (pp. 24 to 77), has treated the subject exhaustively, and has shown ingeniously that the name chrotta and probably crwth may be derived from the words tortoise and toad in the various languages.

The evolution of the chrotta, crowd, etc., culminated in the Welsh crwth, about which very little reliable information is extant; the assertion that it was played with a bow earlier than the 16th or 17th century remains absolutely unproved. The verses by Venantius Fortunatus, Bishop of Poitiers in the 6th century*—

> "Romanusque lyra, plaudat tibi, Barbarus harpa,
> Graecus achilliaca, chrotta Britanna canat,"

have been variously translated—

* See Poemata by Ven. Fortunatus, lib., VII., cap. 8, p. 245, in Migne's *Patrologia Sacra*, tom. 88.

"The Roman praises thee with the lyre, the Barbarian sings to thee with the harp, the Greek with the cithara and the Briton with the crwth or crowd."

The achilliaca refers to the cithara used by Achilles (Homer's *Iliad*, book X.).

These lines have often been quoted to prove the fact that the crwth was known in the 6th century and played with a bow; this statement is absolutely unproved, as the use of the bow with the crwth cannot, at present be conclusively placed further back than the 14th century. The crwth of the 18th century had a soundchest composed of two tables connected by ribs of graduated width.

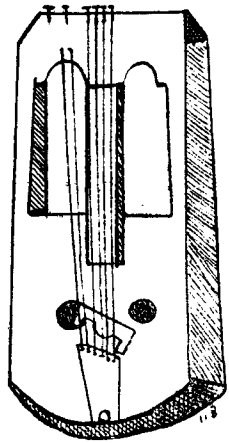


Fig. 33.

Welsh Crwth, 18th Century. From "Musical and Poetical Relicks of the Welsh Bards," by Edward Jones.

The cithara in transition was by some writers called Rotta (see Chap. VII.).

More will be said on this subject in a subsequent chapter.

CHAPTER III.

"Soundchests, Soundholes, Bridges, Tailpieces, Fingerboards, &c."

Before proceeding further in our study of the instruments of the past, it will be well to understand the use and relative value of the different parts of the instruments, so as to be able, on seeing a fresh specimen or illustration, to perceive its distinctive features and to classify it. This chapter, however, does not claim to be exhaustive, but rather suggestive and stimulating.

The ancestor of all stringed instruments was, as has been said, probably the hunting bow, of which the string, on being plucked, gave out a note.

Ulysses (Homer's *Odyssey*, xxi., 404), when he had strung his bow in the sight of the overbearing wooers of Penelope, whom he wanted to chastise, tried the string with his right hand, and it gave out a sweet note, as clear as that of a bird.

The musical sound to be derived from the vibrations of a string alone is feeble and unsatisfactory in the extreme, owing to the smallness of the surface of the vibrating string which influences the surrounding air. Stretch the string, however, over a resonating body, a simple wooden table or thin plank of wood, and you will notice a considerable increase in tone, connect the string, further, with the soundboard by means of a bridge of wood, which will transmit the vibrations to the

sound-board, and again the volume of sound will be increased; further, instead of the simple wooden table, give the string a hollow soundboard with soundholes to let out the sound and give elasticity to the soundboard, and you have the chief characteristics of the violin in their primitive state.

The primary object of the soundboard is to take up the vibrations of the strings, and by providing a larger resonating surface than that given by the strings alone, to magnify the intensity of the sound. Of the two kinds of vibrations, the transverse is undesirable in a soundboard; it is the *molecular* which is essential. The molecular shocks which transmit corresponding shocks to the surrounding strata of air, thus causing sounds, can only be intensified by applying more force to the vibrating strings; each vibration of the string is therefore responsible for a corresponding molecular impulse of the vibrating soundboard, and for the intensity of the sound, thus enabling the performer to produce the most subtle and delicate variations of tone solely by his touch. Spruce fir is superior for making soundboards to all other woods, by reason of its elasticity and resonant power.

Soundchests are of two great types, and should ever be the primary consideration in classifying and identifying stringed instruments. The first and most primitive was the vaulted, carved out of a solid piece of wood, with a flat soundboard and no ribs. The second, a decided advance on the first in point of construction, was shallow, and consisted of parallel tables of wood joined by sides or ribs of equal width. Originally this type of soundchest was also hollowed out of a single block of wood. (See Fig. 165). These two types of soundchests can be traced from the remotest ages to the present day, growing up side by side, the second type, however, belonging always to the nobler instruments, and having some affinity with the violin.

The most primitive soundchests hollowed out of blocks of

wood assumed various shapes; that of a cylinder for instance, such as the urheen* of the Chinese, which resembles a croquet mallet with the handle slightly out of the middle; the sound-

Fig 34.

Chelys lyre, Herculanum. "Le Antichita di Ercolano," Vol. I., pl. 43.

board here consists of a piece of serpent skin stretched over the hollow; sometimes large nuts were used instead of blocks of wood, as in the Hindoo koka* and the Arab gunibry.*

The origin of the lyre is ascribed to Hermes or Mercury, and one of the legends describing its invention states that

* All these instruments can be seen at the South Kensington Museum, and illustrations of them are given in Carl Engel's "Catalogue of the Musical Instruments in South Kensington Museum."

Hermes, after the waters of the Nile had returned to their bed at the yearly inundation, was attracted by sweet sounds proceeding from the banks, and on walking towards the spot he found a dead tortoise, of which the shell alone remained, with some tendons stretched across it, and the wind playing among these caused them to vibrate and emit sweet sounds; this gave the god a subject for meditation, of which the upshot was a musical instrument (see Fig. 34), with a soundchest composed of a tortoise-shell, over which was glued a parchment or thin wooden soundboard, and three—some say four—strings. (See San Isidore's "*Etymologiarum*," Lib. III. cap. xv.) A similar story is told of Mercury by the Greeks.

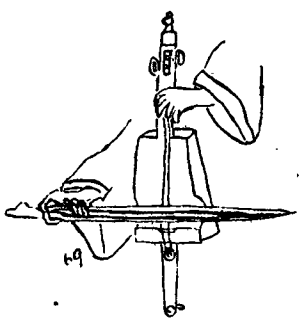


Fig. 35.
Rebab-esh-sha'er (the poet's rebab.)

The kokiu* of the Japanese and the rebab-esh-sha'er* of the Moors (see Fig. 35) were composed of wooden frames, the first square, the second of trapezoid shape, over which were stretched at the top and bottom soundboards of skin. Boat-shaped soundchests are to be found in various instruments like the Moorish rebab (see Fig. 14) and the Egyptian nanga (Fig. 36), of which latter several specimens in fairly good preservation are to be seen in the British Museum (fourth Egyptian Room, Case A). One of these, No. 24564, is an elegant instrument, with a sphinx head, and is painted in colours, chiefly blue, green and terra-cotta. The soundchest of the lyres in its mediæval development is to be found in some rottas, in crowds and crwths; its chief characteristic is a vaulted

* All these instruments can be seen at the South Kensington Museum, and illustrations of them are given in Carl Engel's "Catalogue of the Musical Instruments in South Kensington Museum."

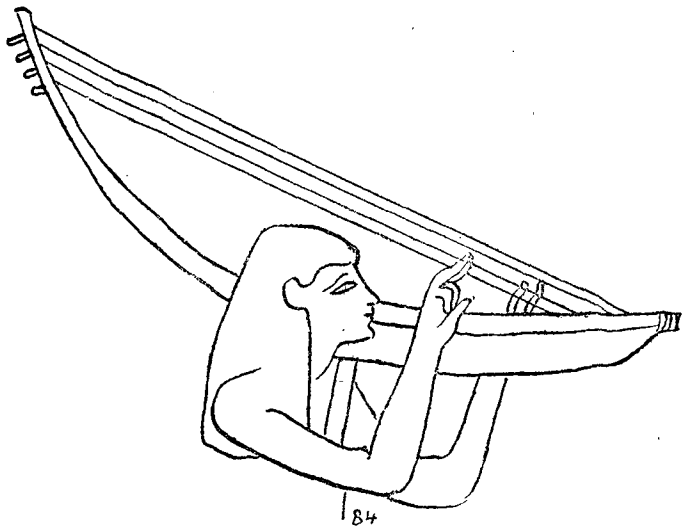


Fig. 36.

Egyptian Nanga. Primitive harp. From Thebes-Kourna. Champollion's "Monuments de l'Egypte et de la Nubie." Tom. II., pl. 154.

back scooped out of a single block of wood with one or two holes made in the soundchest, through which the hand passes to stop the strings (see Figs. 33, 37 and 38). It is a curious fact worthy of notice, that among the European precursors with which we become acquainted in our archæological researches, those with soundchests of the second type (that of the violin) survive, whereas most of those of the first type become extinct or sink into insignificance: viz., the cithara of the Greeks lives to the present day in the Spanish

Fig. 37.

Crowd, 13th cent., from a bas-relief on a seat in the Choir of Worcester Cathedral. Carter's "Ancient Sculpture."

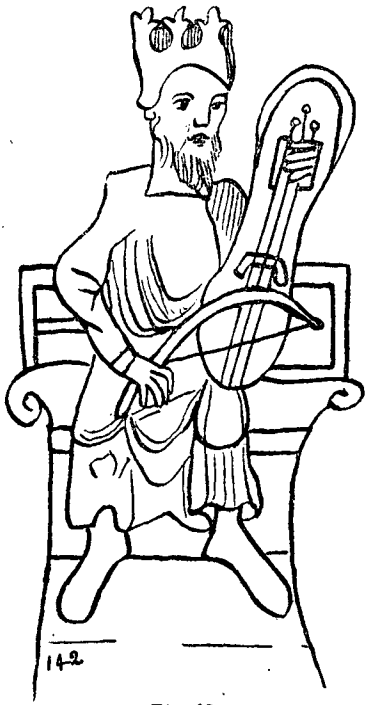


Fig. 38.

Crout, 11th cent., France. From MS. of S. Martial of Limoges, Bibl. Roy. Paris.

mandolyre or guitar-lyre, which is merely a true cithara (with ribs and shallow sound-chest) to which has been attached a guitar-neck with frets. The guitar, which was identical with the guitar-fiddle until the moment when the bow was applied to the instrument, is still a favourite, whereas the chelys lyre, with all its mediæval developments above mentioned, is extinct, as is also the rebab, with its descendants the rebec, gigue and pochette.

The rebec and gigue may be distinguished from the other stringed instruments of the middle ages by the fact that the back of the soundchest and of the neck *is in one piece*, covered with a thin piece of wood serving as belly and front of the neck, which in the rebec does duty for a fingerboard; the addition of the latter forms the main difference in the gigue (Carl Engel.)

Incurvations in soundchests are generally considered to have been suggested by the use of the bow, but in the case of the lyres and their descendants, the natural curve of the horns which formed its primitive arms, gave the lyre and cithara a waist, and this curve was preserved for the sake of elegance when the horns were replaced by wooden arms or supports for the cross-bar. The corner blocks, which fix the form of the incurvations of viols and violins, distinguish the former from the vielle or guitar-fiddle, in its most perfect form.

The "*ff*" holes of the violin are so delicately shaped, that to alter them in the slightest degree would be to spoil the tone of the instrument: their shape and position on the belly are the inevitable result of the arch of the latter. The object of the soundholes is to give elasticity to the soundboard; to enable it to vibrate freely and communicate its vibrations to the rest of the soundchest.

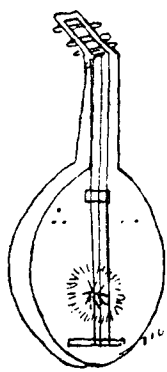


Fig. 39.
Guitar, 15th cent., from a MS., "Miroir Historical de Vincent de Beauvais," Bibl. Imp. Paris, No. 6731. Willemin, "Monuments Inédits."

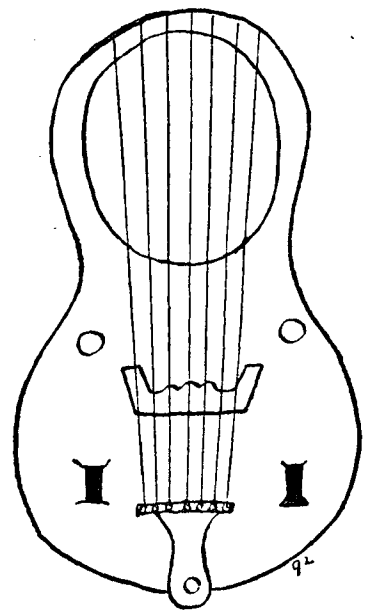


Fig. 40.
Cithara (in transition), 12th cent. Harleian MS. 2804, Brit. Mus.

If a violin were made without soundholes, it would not be able to bear the 68 lbs. tension of the strings when strung up to pitch, nor the 26 lbs. vertical tension on the bridge, seeing that in itself the violin only weighs about one pound; the result would be that the belly would be crushed in. To preserve the tone and pitch of the violin, the "*ff*" holes, as well as every other part, must be shaped according to well-defined proportions.

The position of the soundholes, on each side of the central point of the soundboard, left it free to vibrate, and rendered after-vibrations impossible. This in bowed instruments is highly important, as the bowing can be continued as long as the note is required to sound; but no doubt the tone of the *pizzicato* suffers in consequence. In instruments of which the strings are plucked, the soundboard is cut out in the circular shape called "rose," to ensure the prolonged vibration which is essential.

The ancient Egyptians more than 3,000 years ago knew the use of soundholes, and generally made them round and small (see Fig. 32), but they did not always place them on the belly; on the contrary, they are often to be found on the back; this would considerably soften the tone of the instrument, depriving the belly of much of its elasticity, in fact muting it. Probably the Egyptians knew this also, and purposely made the soundholes on the back to soften and mellow the shrill notes of their nefers.

Soundholes of almost every imaginable shape have been tried since then; the lyres mostly had round ones, after the style of Oriental instruments, but in the latter the circle is fretted or carved in more or less elaborate roses (see Fig. 39). Later, the circle was divided, crescents were used; ovals, tongues of fire, flaming swords (characteristic of the viola d'amore), "S" holes, squares (see Fig. 48), holes in the shape of a Roman I (see Fig. 40), of a "*C*" (which placed back to back formed one of the characteristics of the viols), of half an oval (see Fig. 41), of an eye (see Fig. 47). The position of these soundholes has varied greatly according to nation and time, and two or more kinds were frequently combined on the same instrument.

The bridge fulfils two or three functions in stringed instruments: it raises the strings to a convenient height above the belly for bowing, twanging or striking them; it conveys to

the soundchest the vibrations excited in the strings; and it marks *one* boundary or fret of the vibrating string, determining its length; the *other* being the nut of the peg-box, which raises the strings clear of the fingerboard; the string between the bridge and the tailpiece will, when vibrated, also give out a note, but of very high pitch and weak tone, naturally, since it is so short.

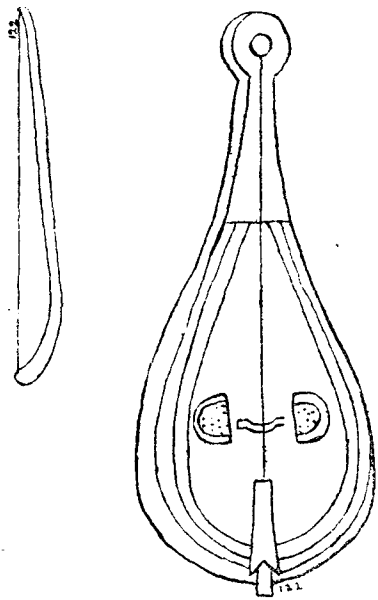


Fig. 41.
"Lyra Teutonica" with bow. Gigue. 9th cent., from MS. of S. Blasius. Gerbert's "De Cantu et Musica Sacra."

The violin-bridge, made of maple wood (see Fig. 11), assumed its present shape at the hands of Stradivarius; its influence on the tone of the instrument is considerable owing to its use, position and construction. The arch of the bridge is just sufficient to allow the bow to vibrate each string separately; the feet are absolutely necessary to raise the bridge over the central longitudinal join of the belly, the latter being

a node with a starting point for the vibrations on each side of it; it is most important that this portion of the soundboard be left free. The feet both rest on the belly; the right foot (on the side of the E string) is kept rigid, just on the side of the instrument on which the tension of the strings is greatest, by the *soundpost*, a thin round stick of wood resting on both belly and back, and transmitting the vibrations of the strings to the latter; the left foot rests just above the bass or sound bar, a fine strip of pine glued on the inside of the belly on the side of the G string. In consequence of the right foot being rigid, the left vibrates the more strongly, and communicates the vibrations of the strings to the whole belly and sound-bar. From these few facts will be seen the importance of this part of the violin. Instruments with strings plucked or struck by hammers do not require an arched bridge, a thin strip of hard wood, maple or ebony, in the guitar, is sufficient to raise the strings; for as in these instruments the soundhole is in the centre the bridge does not require to have feet.

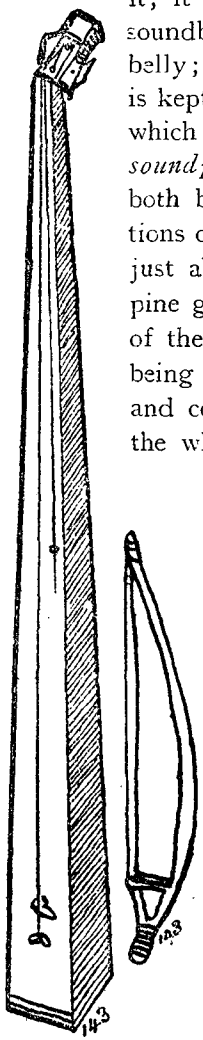


Fig. 42.
The Tromba marina. Sebastian Virdung, "Musica getutscht."

It will be observed in the various illustrations that many different shapes of bridges have been tried; the only two which call for explanation are those of the crwth (Fig. 33, p. 35) and of the tromba marina (see Fig. 42). The crwth bridge had two feet, and was placed obliquely across the soundboard; the right foot, three quarters of an inch long, resting on the belly, while the left, two and a half inches in length, passed

through the soundhole and rested upon the inside of the back, doing duty for soundpost as well; this bridge was so flat that when a bow was applied to it, the 1st, 2nd, 3rd and 4th strings could not be sounded singly. The tromba marina or marine trumpet (Fig. 42), a descendant of the Greek monochord, had a bridge of which one foot was glued to the soundboard, whilst the other, in response to the vibrations of the single string of the instrument, trembled violently on the soundboard, giving out a reedy tone, which was reinforced by sympathetic strings within the soundchest.

The kind of box found on some kitharas (see Fig. 43) which was a combined bridge and tailpiece, as in its modern descendant the guitar, will receive due notice in the chapter on Greek stringed instruments.

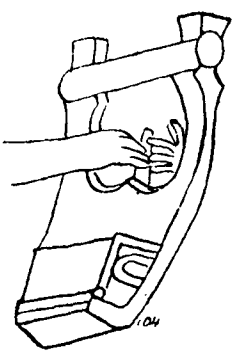


Fig. 43.
Cithara. Visconti's "Museo Pio Clementino," Pl. 21 (Erato's Cithara).

In many of the miniatures in MSS. the bridge has either been left out altogether by the artist, or drawn as though the strings passed *under* it.

The pegs are the wooden pins round which the strings are wound to tune them; their shape is of little importance in studying their history, but their position in the head of the instrument helps to classify the different specimens. The custom of setting them in the back of the head is Oriental, and prevailed among instruments of the lute tribe introduced by the Moors. Great care must be taken to make the peg fit exactly into its hole, or it may slip and let the string down. Some mandolines and guitars have pegs fitted with cog-wheels, to prevent them from slipping back after they have been turned.

Fig. 44.
Cross-bar of Greek cithara with pegs. From "Le Antichita de Ercolano," Vol. III., p. 5.

In many of the Greek citharas the strings

were passed round little pegs (see Fig. 44), hooks or knobs (see Fig. 45), which were fastened into a roller bar made to revolve on screws thus tightening or slackening all the strings together (see Fig. 46). In the illustration, the Greek performer is precisely tuning up her instrument in the manner described above. In other citharas the strings were simply rolled round the revolving bar (see Fig. 47).

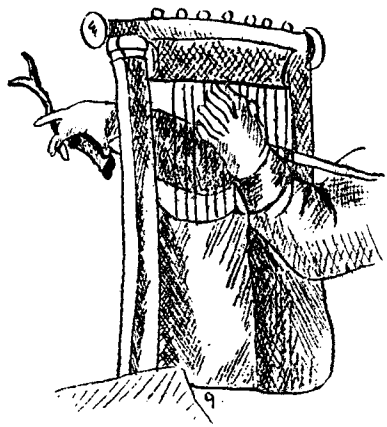


Fig. 45

Cithara with knobs on the cross-bar (back view). The right hand holds a primitive plectrum. From "Le Antichita de Ercolano," Vol. IV., p. 201.

In a MS. of the tenth century is shown a cithara with tuning pegs or pins and a hammer-like tuning wrench which is fixed in a hole made through the cross-bar (see Fig. 48).

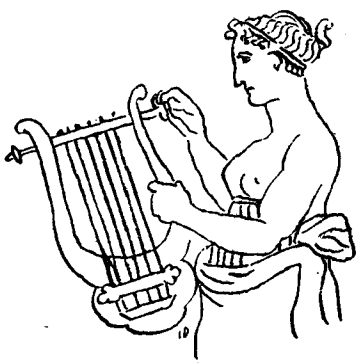


Fig. 46.

Tuning the lyre. From Thomas Hope's "Costumes of the Ancients," Vol. II., p. 193.

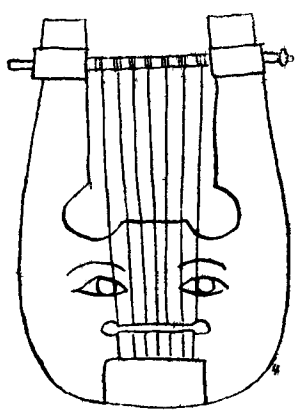


Fig. 47.

Cithara with cross-bar round which the strings are wound. From a Greek vase. Thomas Hope's "Costumes of the Ancients" Vol. II., p. 192.

Representations of lyres are often found with ring contrivances attached to the revolving bar by means of which the strings were tightened or slackened (see Fig. 20). The Egyptian kithara had strings of graduated length tied round the revolving bar, which was naturally higher at the bass of the

Fig. 48.

Cithara of the 10th cent. with tuning pins and a tuning wrench. From a MS. Bibl. du Roi., Paris. Willemin, "Monuments Inédits."

instrument than at the treble, and to tune the strings these were simply made to slide up or down the bar (see Figs. 49 and 165).

The use of this tailpiece is to receive the ends of the strings

and support them in a rigid position; it is furnished with the same number of holes as there are strings. In the cithara and its modern descendant the guitar, the tailpiece serves as a bridge as well, being furnished with a higher nut than ordinary fiddle tailpieces (see Figs. 30 and 50A). In some primitive instruments there was no tailpiece, the strings were fixed to pins stuck in the tail end; in others, the artist, as before stated, has represented the tailpiece suspended by strings near the middle of the instrument (see Figs. 9 and 12, the object of this may have been to shorten the strings so as to obtain the shrill tone proper to a rebec. The tailpiece has assumed various forms in different countries and periods: straight (Fig. 29), round, half-circular (Fig. 50), square, crescent-shaped (Fig. 28), box (Fig. 43), &c., but since the twelfth century the wedge-shaped, similar in outline to the modern one, has gradually assumed the ascendancy (see Fig. 40).

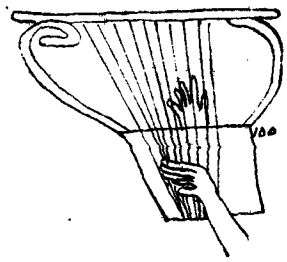


Fig. 49.

Egyptian kithara, from Thebes-Kourna, in which the strings are made to slide along the cross-bar for tuning purposes. From Champollion, "Monuments de l'Egypte et de la Nubie," Tom. II., pl. 175.

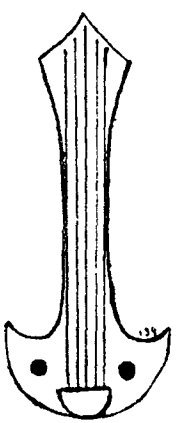


Fig. 50.

Cithara in transition, with half-circular tailpiece. From a MS. in Trinity College, Cambridge (R. 17, 1).

The fingerboard of violins consists of an ebony board placed over the neck, over which the strings are stretched, and against which they are stopped or shortened by the fingers, to form the intervals of the chromatic scale. On instruments of which the

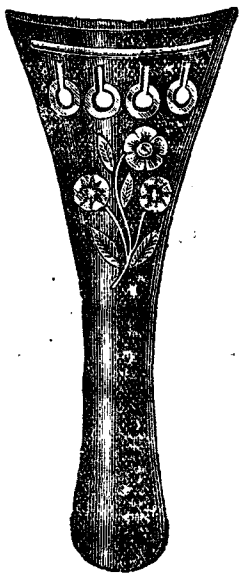


Fig. 50A.
Modern Violin tailpiece. (Block kindly lent by Messrs. Beare & Son.)

strings are plucked, and on many mediæval bowed instruments, such as the viols, the fingerboards have the points at which these intervals are to be found marked by frets, *i.e.*, thin strips of wood, gut or metal fixed transversely, and forming bridges, by means of which a pure intonation is made easy (see Fig. 29).

The height of the violin bridge makes it necessary that the fingerboard and tailpiece should be raised in a slanting position above the belly (see Fig. 4). Egyptian nefers and lutes of a high antiquity had fingerboards with frets, which argues a high state of culture in music, for on their three-stringed nefers the Egyptians could produce more notes than on their harps.

It is difficult to be sure from sculptured representations whether any lyres or citharas were made with fingerboards, for the strings were always sculptured out of a solid block of marble *in one piece* without isolating the strings, so that they look as though they were lying over a fingerboard. In the Second Græco-Roman Gallery, at the British Museum, there is a figure of Erato holding a lyre of which the back can be viewed, and it has a fingerboard set on a neck, rounded at the back, into which four pegs are set, and having beside a nut or bridge where it meets the soundboard: but as the statue has been restored, the evidence is not reliable.

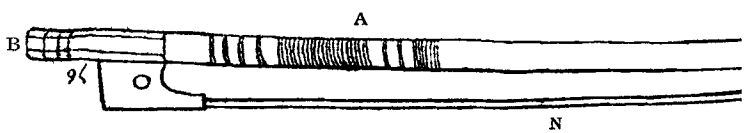
The gigue (German, *Geige*) was an improved rebec, from

which it was distinguished by having a fingerboard; therefore the "Lyra Teutonica" of the MS. of St. Blasius (see Fig. 41) is, properly speaking, a gigue and not a rebec, since it has a fingerboard.

CHAPTER IV.

The Plectrum and the Bow.

The various manners of setting strings in vibration, which also represent so many steps in the development of the great family of "strings" (*i.e.*, violin, viola, 'cello and double bass), are:—



Modern

(1) *By twanging* with the fingers, a method which still remains in the *pizzicato*, and in instruments of the guitar and lute families.

(2) *By plucking* with a plectrum, quill or other small implement—a principle later applied to the harpsichord family, and and still in use with the mandoline, zither, &c.

(3) *By striking* with a plectrum, and afterwards a small hammer, as in the dulcimer, the cembalo, and later, the pianoforte.

(4) *By friction (a)* with a plectrum, a long feather, or with a bow; (*b*) with a wheel, as in the hurdy-gurdy.

Before investigating the question of the ancestry of the

modern bow it is as well to make oneself acquainted with its construction. It is to Francis Tourte, born in Paris in 1747, that we owe the most perfect model of the violin bow known (Fig. 51), and it is curious to notice that although the bow was used so long before the violin was developed, it did not reach a state of perfection until more than a century and a half after the Cremona masters gave us the violin.

The different parts of the bow are described below.

(1) The *stick* (A), about 29½ inches long, is made of Pernambuco wood, which alone combines the requisite lightness and power of resistance; it will be observed that in modern bows the stick is bent by heat till it is slightly convex to the hair, instead of being more or less concave to it as in old bows.

(2) The *screw* or *ferrule* (B) (Figs. 51, 52 and 54) at the extremity of the stick which is held by the hand, is the means

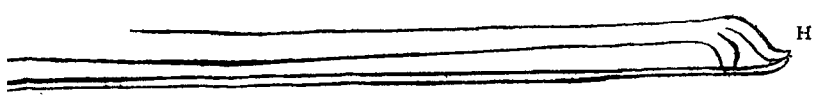


Fig. 51.
iolin Bow (Tourte Model).

of tightening or loosening the hair of the bow. This screw, about 3¼ inches long, hidden within the stick, runs through the eye (Z) (Fig. 52) of another little screw at right angles to it, which is firmly embedded in the nut.

(3) The *nut* (C) (Fig. 52). The nut slides up and down in answer to the screw, along the stick; it contains a little cavity or chamber into which the knotted end of the hair is firmly fixed by means of a little wedge, and then flattened into a ribbon by means of a ferrule (E.) The hair outside the nut is further protected by a little mother-o'-pearl slide (P).

(4) The *hair* (N) (Fig. 51) is carefully chosen from the best white horse-hair, and each of the 150 or 200 hairs

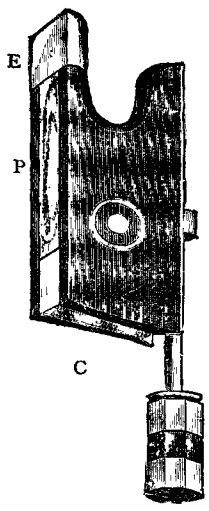


Fig. 52.
Nut of the bow showing the screw. (Kindly lent by Messrs. Beare & Son.)

composing the half-inch wide ribbon of each bow, must be perfectly cylindrical and smooth.

(5) The *head* (Fig. 53) (H) is cut in one piece with the stick, and is fitted with a chamber and wedge contrivance similar to that of the nut, in which the other end of the hair is immovably fixed. The reader will perceive, on examining the illustrations of primitive and early bows, in what respects they obviously differ as to lightness, elasticity, convenience, durability, &c., from the Tourte bows.

It was the hunting bow which in all probability first suggested to man the possibility of making music by vibrating strings, in addition to those methods already known, *i.e.*, blowing into pipes and striking resonating substances of wood or metal. Given a string fixed at both ends, the most natural manner of inducing it to vibrate and produce a

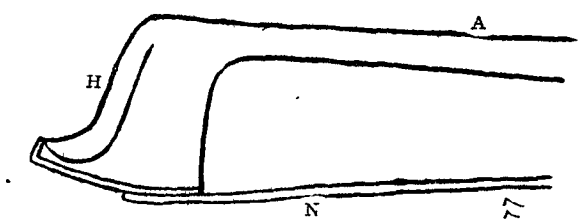


Fig. 53.
Head of bow.

musical sound was by means of the fingers; and for centuries after others had been discovered, this method remained the most favoured. Instruments of the lyre or harp tribe re-

tained their ascendency during the Egyptian, Assyrian, Greek and Roman civilization. Stringed instruments themselves underwent many changes and developments; the inventions of soundboards and bridges added sonorousness to the strings; that of the fingerboard was a double step forward: it made it possible to obtain more than one sound from each string, and to make a twofold use of the hand:—(1) for plucking, (2) for stopping the strings.

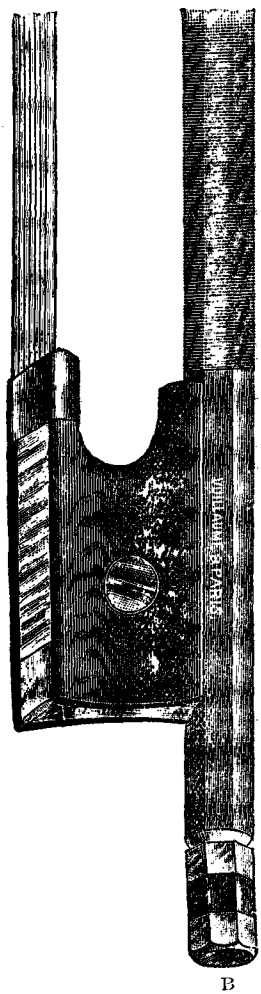


Fig. 54.
Illustration of bow. (Kindly lent by Messrs. Beare & Son.)

Twanging with the fingers answered admirably with strings of hemp, gut or silk, for the player was able to command various shades of expression. Loudness of accent and great brilliancy of tone, however, had to be obtained in a different manner; small pieces of tortoise-shell, ivory, metal, wood, bone, leather or quill were used for the purpose (see Fig. 55), the Greeks called them *plectrones* (singular, *plectron*, πλῆκτρον, from πλήσσειν *plessein*, to strike), and the Romans *plectra* (singular, *plectrum*, from *plango*, I strike)—an adaptation from the Greek; another word is found, however, in some Latin classics instead of plectrum, *i.e.*, *pecten*, meaning a comb, and chosen because the plectrum, like the weaver's comb, was held in the right hand and inserted between the stamina of the

Fig. 55.

Plectrum, with an arrow point at one end and round at the other. From a statue in Spain. Clarac, Vol. iii., pl. 524.

lyre as the comb was between the stamina of the loom.

Plectra have been in use from the earliest times in Egypt and Asia in a variety of shapes and sizes, but they were not always held in the same manner. The Spartans were very conservative about old customs, and Plutarch tells us in his "Apothegmi Laconici" that on one occasion, during a religious rite, a citharist was punished because he did not use the plectrum, but twanged the strings with his fingers; "this latter, however, is a much more delicate way of sounding the strings and the sound then gives more pleasure," adds Plutarch.

Athenæus, 3rd cent. A.D., (Tom. iv. p. 183), speaking of Epigonus, says, "he was a great master of music, and twanged with his hands and without plectrum."

Again, Athenæus (Tom. xiv. p. 635) says that he agrees with Aristoxenus that the magadis and pectis (two instruments of the lyre or cithara tribe about which we have no very reliable evidence) are played without the plectrum, and also that Anacreon called the magadis "*organon psaltikon*" when sounded with the fingers.

These quotations seem to show that although the use of the plectrum was a later invention than twanging the strings with the fingers, the critics recognised the fact that the sole use of it was not the highest form of art. We know from classical writers, as well as from delineations, that the Greeks recognised the value of the different tone-colour obtainable by the two methods of twanging the strings, and frequently combined them on the same instrument. It is not impossible that they used the fingers to produce some kind of harmony, by playing chords, which would be impossible with the plectrum. A few quotations will suffice on this point.

The Imagines of Philostratus the Elder and Younger contain many references to lyres, citharas and plectra. For instance, in Book i., No. 7, "Memnon" (by the Elder), we hear that "the rays of the setting sun falling upon the mouth of Memnon like a plectrum seem to produce a voice, and to console the day by the sounds of that artificial voice." Now, the tone-colour produced by the use of the plectrum was of a brilliant cheerful quality, suitable to raise the spirits of the desponding.

In the same book, No. 10, "Amphion"—after a description of the construction of the lyre, to which reference will be made in a proper chapter, Philostratus tells us that, "seated on a mound, Amphion beats time with one foot; holding the plectrum with the right hand, he strikes the strings; he twangs them with the fingers of the left hand, which are outstretched, &c."

Philostratus the Younger (Imagines vii., no. 7, p. 403, "Orpheus") says: "Of the two hands, holding the plectrum firmly in the *right* one, with the elbow outstretched and the palm bent inwards, he produces a loud sound; but with the *left* he plays the strings with straightened fingers." (The cithara.)

Ovid (Her., epist. xv. 198) says that "the plectra has become silent from sadness, and the lyre is mute with grief." This may only be a poetical figure of speech; but metaphors are usually founded on fact—the lyre played with a plectrum is certainly unsuitable for expressing sad music.

Tibullus, elegiac poet, of the first century B.C. (Lib. iii., Eleg. 4, 39) proves that the plectrum and fingers, respectively, were used to accompany joyful and sad music. The passage freely translated runs thus:—

"At first he came, and playing the cithara with an ivory plectrum, he sang a joyful song with resounding voice; but

afterwards playing [or twanging] with his fingers in a sweet manner, he sang these sad words," &c.

Many other quotations might be given, but two well-known ones must suffice. Virgil, in the Æneid, Book vi., v. 647, says:—

"There they also dance in circles, singing a festal song; and the Thracian bard in his long flowing garments accompanies the rhythmical song on the seven-stringed cithara, playing it now with his fingers, and now with the ivory plectrum."

Lucanus, in his panegyric on Piso, says: "He plays the chelys with his fingers and the ivory plectrum."

A very long plectrum made its appearance, which, with instruments of many strings, would have been very inconvenient for either plucking or striking; some have thought (see Carl Engel's "Researches into the Early History of the Violin," pp. 4 and 6) that this was used for rubbing the strings, and that it was therefore the ancestor of the fiddle bow. Any one can prove the efficiency of this kind of rude bow for himself, by taking a long stick with a rough edge, or by applying resin to it, and then rubbing a thin gut or twisted silk string with it. It is a well-known fact that Paganini could play his violin with a resined reed instead of a bow, but that the ancients ever practised this must at present be relegated to the realm of unproved possibilities.

When wire strings came into use in the fourteenth century (drawn wire was first made at Nuremburg in the fourteenth century) the plectrum, or long nails as a substitute, became a necessity to prevent soreness of the finger-tips. So long as the plectrum was only required for melody or *arpeggio* passages—and these latter were only possible when the strings required were placed next each other—it was found invaluable to give brilliancy of tone.

Since our forefathers acquired the knowledge of harmony, the plectrum has lost favour; fingers can select the strings

necessary to form a chord and twang them simultaneously, which is impossible with a plectrum. Some Asiatic nations of the present day use small plectra, which fit on to the fingers of the hand like thimbles, not for the purpose of playing chords, but to obtain a brisk quality of tone, and to produce grace notes the more easily. A similar contrivance is used on the zither for the thumb (see Fig. 56), which plays the melody on wire strings, while chords are produced on guts with the fingers.

Fig. 56.
Zither thumb-ring. (Kindly lent by Messrs. Beare & Son.)

When the want of a plectrum was first felt, it would be only natural to suppose that the ancients made use of such objects as they found at hand, ready made, before proceeding to make plectra for themselves; if we are to believe Pollux, this was really the case (see Pollux iv. 60), "e plectra caprarum erant labia [or ungalæ]"; he tells us the earliest plectrum was a goat's foot or hoof (more likely a kid's), and there are actually delineations of this amongst the statues and paintings of the Greeks and Romans (see Figs. 57 and 58). Other natural objects, such as twigs broken off the nearest tree (see Fig. 59), pieces of horn, quills (see Fig. 60), are also in evidence as plectra, and the latter were amongst the latest survivals and were still in use in the seventeenth and eighteenth centuries. The most ancient delineations of plectra that we possess are the Egyptian and Assyrian, and they resemble those in use in Europe during the late middle and early modern ages, rather than those of the Greeks, as can be seen by examining drawings of the famous sculptures, copies of paintings, &c., contained in works by Champollion, Botte, Place, Clarac, Montfaucon, Willemin, &c., &c., which want of space

Fig. 57.
Natural plectrum, consisting of a kid or goat's hoof. "Le Antichita de Ercolano," Vol. iii., p. 5.

Fig. 58.
Natural plectrum—a bone—probably a goat or kid's foot, found in a painting excavated at Portici. "Le Antichita de Ercolano," Vol. iii., p. 5.

prevents my reproducing here. The Assyrian rod-like plectrum to be seen in the Nimrod Gallery at the British Museum (4 B.), in the "Return from the Lion Hunt" (B.C. 880, reign of Assur-Nasir-Pal), in the hand of a musician playing a triangular harp-like instrument called Trigonon by the Greeks, seems too long to have been conveniently used for twanging or striking. Another similar plectrum, but held in a different manner, will be found in the Kojundijick department of the Assyrian Gallery, and also drawn in "Nineveh," by Place, p. 57.

Fig. 59.
Natural plectrum, consisting of a twig or an antler, used with an eleven-stringed cithara. "Le Antichita de Ercolano," Vol. Vol. iv., p. 201.

Fig. 60.
Quill plectrum, 12th cent. From a Latin MS., Biblioth. Strasburg. Willemin, "Monuments français inédits."

One or two of the plectra are curiously arched. Fig. 61, for instance, dating from the fifth century B.C., is held with the concavity downwards, whereas that in Fig. 62, held by "Erato Psaltrian," seems to form a sort of cradle for her hand; a third, of more recent date, resembling a scythe, and taken from a Harleian MS. (No. 603) of the eleventh century (thought by experts to be a copy of the earlier Cotton MS. known as the Utrecht Psalter), looks as though it might have been a primitive bow of which the artist had omitted the string or hair in copying.

Fig. 61.
Broad arched plectrum used with a lyre. Third Vase Room, Brit. Mus., Case 31, E. 378. Athens, 5th cent. B.C.

Fig 62.
Semi-circular plectrum held by the Muse "Erato Psaltrian." From a wall painting at Herculanum. Clarac, Vol. iii. pl. 520.

The Greeks, who in all arts and sciences aimed at no less an ideal than *perfection*, only associated the most perfect musical instruments then known with their religious rites, their drama, and their national games or contests; and finally these only were perpetually by them on their monuments and paintings. This characteristic of the ancient Hellenic race of only glorifying per-

fection, as known to them, is consistently borne out by their history; whether, therefore, the use of the bow for stringed instruments was known to them can be with us but a matter of conjecture. The bow at its early stages of development must have been crude in the extreme and the use of it excruciating to musicians. In all cases where the accessories or parts of an instrument are in process of evolution, the amount of satisfaction and enjoyment to be derived from playing upon the instrument must always be in proportion to the culture, intellect, and sense of beauty of the nation. The Greek cithara was perfect as a cithara, and did not subsequently undergo any important development with other races as long as it remained a cithara. That seems a quite sufficient and satisfactory reason to account for the numerous references to the cithara and lyre in their literature, the endless delineations of those instruments, and also for the small amount of evidence the Greeks have afforded us as to the construction and use of such instruments as by reason of their crudeness and faulty construction they deemed unworthy to serve the muse they so revered.

Had the bow been used with instruments of the lyre family, we should have found references to it in some of the innumerable passages in the classical writers on the subject of music; and surely, if the long plectrum had been used by them for rubbing instead of twanging the strings, the revolution caused in the character of their music by this proceeding would scarcely have passed unnoticed. If the Greeks used the bow at all, it would have been with instruments of the tamboura kind; these instruments were evidently not favourites, and are rarely found depicted or mentioned; moreover, as these have come down to us, used without the bow till the thirteenth century (see "The Fifty-one Musicians of the Cantigas de Santa Maria," of which a reproduction is given in Riaño's "Spanish

Music"), it seems unlikely that they should ever have been used with it.

The invention of the bow has been claimed by many writers of musical history for Wales, but absolutely without authority —true, the crwth as we know it, from the three specimens of the eighteenth century of which we possess illustrations, was played with a bow resembling that used for our double basses, but reliable evidence of its use at an early age is wanting.

We know that the bow was in use in England in the eleventh century, from the well-known illustration of an Anglo-Saxon fithele in the Cotton MS., Tiberius C. vi., but before that period all is a blank with regard to the bow in England.

Cassiodorus (Op. 2, p. 507), who, in speaking of the music of the ancients, divides their musical instruments into three classes, (1) percussionalia, (2) tensibilia (stringed), (3) inflatilia, in speaking of class 2, says the "tensibilia consisted of chords tied with art, which, on being struck with a plectrum, soothed the ear with a delightful sound, such as the different kinds of citharæ." Had Cassiodorus known of the use of the bow, he would undoubtedly have mentioned it. The same may be argued with even more weight of Bede, the Venerable, whose works are interspersed with references to music and musical instruments, even leaving his two works on music, "Musica Pratica" and "Musica Theoretica" out of the question, as their authenticity is not firmly established. Isidor, Bishop of Seville, to whom reference has before been made, in his Etymologiarum in Lib. iii., although he classifies and describes instruments, says nothing of the bow either.

Which of the civilizations can lay claim to having introduced the bow to the others is still a matter of conjecture and discussion. There are some few circumstances and references which point to Asia as the cradle of the bowed instruments.

A Hindoo tradition assigns the invention of the bow to

Ravanon, King of Ceylon, more than 3,000 B.C., and the instrument for which he invented it was called *Ravanastron.* A primitive instrument of that name is still in use in Hindostan, with either one or four strings (see Fig. 17, from Sonnerat's "Voyages aux Indes Orientales," Paris, 1806, Vol. 1, p. 182).

It has been noticed that in countries which have not yet attained to a high degree of civilization, the development of music is very slow. That would account for the fact that musical instruments in the East seem to have made little or no progress within the past five or six centuries—among the *people* more particularly, for the influence of European civilization is more noticeable among the higher castes resident in large towns.

Among the ancients, however, India had the reputation of having attained to a high degree of culture in music; which is borne out by the fact of the extraordinary predominance in that country, at the earliest times of which we possess trustworthy evidence, of stringed instruments of all kinds. Besides this, there are extant several treatises on music. Be this as it may, we hold no absolute proof of the existence of the bow in antiquity among the Hindoos and Persians.

There is a circumstance which may throw some light on the subject, even though that light be somewhat feeble and uncertain. Of all the stringed instruments played with a bow, that of which we possess the earliest and most trustworthy evidence is the rebab of the Arabs, not the *rebab-esh-Shaer* (Fig. 35,) which may be seen in many Histories of Music, but the boat-shaped instrument like the Persian rebab (see Fig. 14), which was sounded with a primitive bow.

An inquiry into the origin of the word *rebab* shows us that it is derived from the Persian *revaveh*, "emitting plaintive sounds" (Engel, "Early History of the Violin Family," p. 12).

Now the Arabs invaded Persia in the sixth century, and it

is recorded that finding the Persian musical system better than their own they adopted it. They declare that they obtained the rebab from the Persians; they probably received the fiddle-bow at the same time, as their name for it is derived from the Persian, too. The Arabs, spreading westward, conquered Egypt at the beginning of the seventh century. In 711 Tarik crossed the straits to Andalusia and at Xeres defeated the armies of Spain: Roderick, the last king of the Goths, here lost crown and life. In 731 a further invasion of the Arabs under Abd-er-Rahman extended in France as far as the Loire, where the chief was defeated by Charles Martel.

After this there was a short peace, during which the Carlovingian King learnt much from the Arabs, whose superior culture gave a fresh impetus to arts and sciences in the south-west of Europe. The Arabs left a trail of civilization in the south of Europe (which they invaded from North Africa), in Sicily, Candia, Rhodes, Cyprus, Malta, Sardinia, and Corsica, and indeed their civilizing influence has in every case outlasted their rule in the countries subject to them. Charlemagne, who flourished towards the end of the eighth century, fought many battles with his paladins against the Moors, and cannot but have been struck with the evidences of a higher civilization which he saw everywhere in their land. He was the most enlightened sovereign of his time, and gathered around him at his court the cleverest men in all branches of sciences and arts. He also established schools of music at Metz, St. Gall, and Soissons, and probably was the means of introducing the new Arabian instruments to the rest of Europe. It is at any rate significant that one of the earliest illustrations of a bowed instrument (a rebab or rebec) in Europe is depicted in a MS. preserved *in the library of St. Gall;* it is a translation of the Psalms by Labeo Notker, who died in 1022, dating from the tenth century, and containing an illustration in pen and ink of King David playing a seven-stringed lyre with a plectrum,

while around him stand four musicians playing a harp, a cithara, a dulcimer and a rebec, with a bow which has a handle (see Fig. 63). As we have no traces of a bow of European origin, it seems reasonable to acknowledge that in all probability we owe it to the Arabs; and we do possess evidence that a bow was known to them in the seventh century, for in an Arabian MS. of that period there is an illustration of a bow with a fixed nut (see Fétis, "Antoine Stradivarius," p. 113). Whether we derive it from India through Persia, Arabia and Spain, or from India through Persia, Phœnicia, Greece, and Rome, the bow slowly but surely grew and developed, varying almost as much as the precursors of the violin in different countries and centuries, until, in the eighteenth century, Tourte, the Younger (born 1747) gave us the most perfect known model.

Fig. 63.
From a MS. translation of Psalms by Labeo Nolker, S. Gall., late 10th cent.

The earliest and simplest bow was formed of a piece of cane pierced at each end, with a hole through which the gut, cord, horsehair, or silk was threaded and knotted. Such are the bows still used at the present day by the Hindoos with their primitive ravanastron, and by the Moors with their rebab. The first improvement on this rude bow was to lengthen the handle, so that the hand in grasping it, which it almost invariably does in the older illustrations, should not arrest the vibrations of the horsehair.

The earliest bow of which we possess an illustration dates from the eighth century (Fig. 64), and is to be found in "Costumes Français," by Herbé, who derives that and a whole page full of various implements, ornaments, etc., indiscriminately from Montfaucon, Maillot, Bonier, Willemin, and Gaignières. As I have so far failed to trace the original, I only give the reference for what it is worth, hoping some

Fig. 64.
"Costumes Français." Herbé 8th cent. (?).

reader may be more fortunate. The next century gives us the bow used with the Lyra Teutonica (see Fig. 65), taken from a MS. of S. Blasius. This bow shows a much greater development than many of those of the eleventh and twelfth centuries, notably that used with the crout (Fig. 38), and is much less curved. The tenth century bow has already been given.

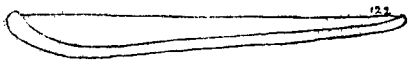


Fig. 65.

From a MS. S. Blasius. 9th cent. Gerbert "De Cantu et Musica Sacra."

The eleventh century, besides the bow already referred to in the Cotton MS., Tib. C. vi., gives us another (Fig. 66) with a handle and a distinct head; the convexity of the stick is slight. In the twelfth century there are many different shapes to be seen, the majority of them with handles (see Figs. 67 and 68), some very much curved, others almost straight. One taken from a Harleian MS., 2,804 has a knob at each end for fastening the string or hair (see Fig. 69) but no handle.

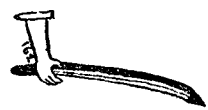


Fig. 66.

From the Church of S. Georges Boscherville 11th cent. (Willemin).

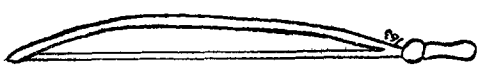


Fig. 67.

Bodleian Lib. N.E.D. 2. 12th cent.

The thirteenth century supplies two straight bows, both from French sources (see Figs. 70 and 71); the first may be earlier than the thirteenth century, the later date assigned in Willemin's book has been given. The bows to be found in the miniatures of musicians in the "Cantigas de Santa Maria" show no special development.

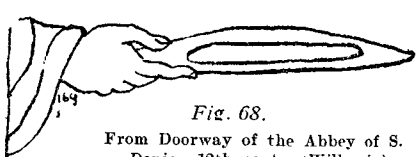


Fig. 68.

From Doorway of the Abbey of S. Denis. 12th cent. (Willemin).

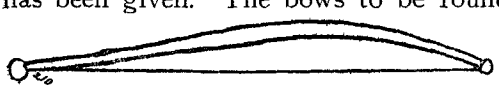


Fig. 69.

Harleian MS. 2804. Brit. Mus. 12th cent.

In a quaint MS. (Sloane 3,983) of the fourteenth century in the British Museum, on astronomy, is to be seen a bow with a contrivance that seems to foreshadow the cremaillère (see Fig. 72); the hair of the bow if finished with a loop might be made to slide up and down the tapering end, fastening into notches not indicated by the artist. Another bow in the same MS. has also curious contrivances for fastening the hair, but the drawing is too rough to give much clue to the working. The fifteenth century gives us a genuine cremaillière bow (Fig. 73), from a painting. Here the hair is fastened to a knob apparently attached to the metal band, which is hitched over the notches at will, thus enabling the player to moderate the tensity of the hair. This method, which was later improved by having a sliding nut instead of the knob shown above, was the best known until the eighteenth century. Fig. 74 is the bow of a gross-geige, that is to say, a bass viol in use about 1500.

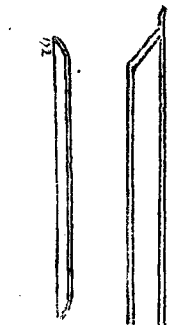


Fig. 70.
From the Soissons enamel basin (Willemin). 13th cent.

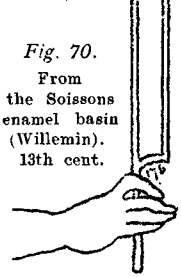


Fig. 71.
From the façade of the Musician's House, Rheims, 13th cent. (Viollet-le-Duc).

Figs. 75 and 76 are taken from Mersenne's "Traité d'Har-

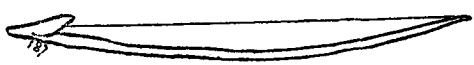


Fig. 72.
Sloane MS. 3983. Brit. Mus. 14th cent.

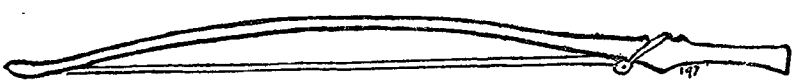


Fig. 73.
From a painting. Viollet-le-Duc, "Dict. Raisonné du Mobilier Français." 15th cent.

monie Universelle," 1627; the first appears to have a ferrule and nut like those of the modern bow, although the pointed

head is, of course, very different; but appearances are deceitful, and what looks like a ferrule is probably the result of the

Fig. 74.

Bass Viol Bow, late 14th cent.
"Musica Instrumentalis," M. Agricola.

fancy of the artist who drew the bow. The invention of a movable nut propelled by a screw is ascribed to the elder Tourte in the eighteenth century. These examples of bows,

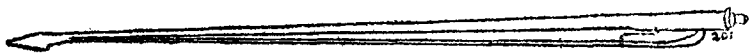


Fig. 75.

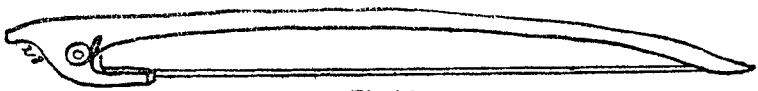


Fig. 76.

"Traité d'Harmonie Universelle." Mersenne. 1627.

with the exception of those of the eighth, ninth and tenth centuries, of each of which I have only found a solitary specimen, might have been considerably multiplied but for the limitations of space.

CHAPTER V.

Stringed Instruments known to the Greeks.

Egypt was the cradle of the arts, yet Europe obtained but little of her knowledge of music as an art directly from her: Egypt was the probable fount from which the surrounding nations obtained their materials, but before they were passed on to our continent the arts had become strongly tinged by the individuality of the race which acted as medium; to take musical instruments alone into consideration, they have retained such strong racial characteristics that after many centuries it is still possible to assign to the different varieties their true nationality.

Just as the Greek civilization is recent compared to the Egyptian and Chaldean, the origin of its music and musical instruments can be traced back to the older nations. In the thirteenth century B.C., for example, when the history of Greece was but commencing with the reputed settlement of the Pelasgi (*cir.* 1290 B.C.), and is misty and legendary in the extreme, the very musical instruments of which she has claimed the invention for her gods Mercury and Apollo, and which intimate and constant use has made peculiarly her own, *i.e.*, the lyre

and the cithara, were already well known and developed in Egypt and Chaldea.

On a fresco at Beni-Hassan, in the reign of Usertasen II., 1700 B.C., is depicted a procession of strangers bringing tribute, and one Asiatic musician, walking by the side of a laden ass, is playing a ketharah (see Fig. 77) with a plectrum, and holding the instrument horizontally before him, unlike the Greeks, who played both lyre and cithara in an upright position. The instrument depicted is a ketharah in a state of transition similar apparently to the *rotta* of the middle ages in Europe (see Figs. 110, 112, 168 and 172). It has been thought that these persons, evidently foreigners judging from their beards and sandals, which mark them as Asiatics, may have formed part of Jacob's procession journeying to Joseph in Egypt. The inscription on the fresco reads: "The arrival to offer the collyrium mestem which the 37 Aamu bring to him." On the scroll held by one of these foreigners are the words: "The year 6 of the reign of H.M. the King of Upper and Lower Egypt, Rakhakheper, &c." (or Usertesen II.). (See Champollion, vol. iv., pl. 361, 362 and 363, and Sir J. Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians," vol. i., p. 480). It is evident, therefore, that neither the lyre, of which there are innumerable and very ancient delineations in Egypt, nor the cithara can. have been the invention of the Greeks, they must have been introduced during the legendary ages by Asiatic and Egyptian merchant or soldiers; but it is equally certain that in no country did the instruments reach such a development as in Greece.

Fig. 77. Asiatic ketharah, 1700 B.C. From Beni-Hassan.

MUSIC HIGHLY ESTEEMED IN GREECE.

The harp, the favourite Egyptian instrument, does not seem to have been appreciated by the Greeks any more than the instruments with necks of the guitar and lute tribes. Music

found in Greece a congenial soil, and developed rapidly; it possessed a high and noble significance for the Greeks, who studied it from a philosophical point of view, as appealing to the mind and soul rather than to the senses. This high standard was lost sight of by the Romans, with whom music gradually assumed a sensuous character, which eventually led to its being excluded from the education of Christian youths and maidens, as exercising an unfitting and corrupting influence on the mind and character. (See Epistles of St. Jerome). It also gradually became separated from the drama, which led to the downfall of the latter in the middle of the fourth century A.D.

USES OF MUSIC IN GREECE.

The first uses of music must have been pastoral, but our knowledge of this is only legendary, whereas we possess early testimony of its use in religious rites and military evolutions; with the latter we are not concerned, for stringed instruments were of little use to the followers of Mars. Songs and hymns, with an accompaniment of lyres, citharas and oboes, (often mistranslated flutes), formed the chief part of all religious rites; and from the fusion of the *dithyramb*, or hymn to Dionysus, accompanied by the above-mentioned instruments, and of the *rhapsodies*, epic poems chanted by rhapsodes to instrumental accompaniment, came the Tragedy (from *tragos*, a goat, and *ôde*, a song), so named from the sacrifice of goats in the worship of Dionysus. The great Greek tragic writers, Thespis, Æschylus, and Sophocles, were musicians, and wrote both the text and music of their dramas. Music formed part of the curriculum of education for youths and maidens, and was daily practised to rhythmical dance steps, in order to elevate and ennoble the mind, and to train it to perceive beauty; whilst gymnastics and athletics performed a like office for the body. (See Plato, "Republic," Bk. III.)

PLATO 428 TO 348 B.C.

Music was regarded as the handmaid of poetry to a certain extent, in that its great aim was to give fuller expression to the latter. Absolute music without words was looked upon as inferior, but nevertheless as one of the most intellectual means of schooling the feelings and forming the character. The very word *mūsicē* itself, "the art of the Muses," shows us that the Greeks regarded lyric and dramatic music, which various Muses combine to inspire, as the highest form. The great importance attached to music in Greece is further demonstrated by the fact that it was looked upon as a gift of the gods (see Plato, "Ion.") Plato says that poets and musicians are directly inspired by the Muses, that their odes are not written in cold blood, by art or theory, but only when they are possessed by "lyric fury," which takes them right out of themselves, leading them whither it wills; further, that each musician or poet can only succeed in the particular style into which the divine afflatus guides him; in all others he only produces commonplaces (would that modern composers understood the wisdom of Plato!): this one excels in the dithyramb, another in eulogy, a third in dance-songs, a fourth in epic poetry (always accompanied on the cithara). In fact, instead of allowing them to work by their own art, the god for the time being takes away their reason and substitutes his own. Besides these uses, music was in request at banquets, festivals, social and civil, at contests in the national games, more especially the Pythian. As the lyres, and still more the citharas, were the instruments most used on all these occasions, it is not surprising that they should not have been allowed to remain long in a crude form. The cithara being, as I believe (see Chapter II. on the question of the Origin of the Violin), the original precursor of the violin, is worthy of special attention.

THE LYRE AND CITHARA.

The lyre and cithara, although they in the beginning belonged to the same class of instruments, and possessed many general principles in common, have yet been the ancestors of two distinct and diverging classes of instruments.

At a time when stringed instruments were all twanged by fingers or plectrum, they must be classified by means of their sound-chests, and the relative position of the latter with regard to the strings; these latter are stretched at right angles to the plane of the sound-chest in all harps; lie parallel to the whole length of it in the psaltery or psalterion proper; extend partly over it and partly *à vide* in lyres, citharas and rottas, &c.; and over sound-chest and neck in guitars, panduras (or tambouras), fiddles, &c.

CONSTRUCTION OF THE LYRE.

The lyre or *chelys*, according to the older myths, was invented by Mercury, or Hermes, who, it is said, made it from the shell of a tortoise, over which he stretched sinews or gut for strings, varying in number, according to different accounts, from three to seven. The use of the word lyre is post-Homeric, and did not become common until the time of Pindar (522 to 442 B.C.): it occurs once in the Homeric Hymn to Hermes, line 423; the verb derived from λύρα, meaning *touching or twanging the lyre*, is unknown in good Greek, the derivatives of cithara being used instead.

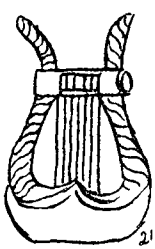


Fig. 78. Apollo Musagetes' lyre, showing kerata. From Naples (Museo Borb., Tom. I., No. 264)

The body, or sound-chest, of the lyre, as the instrument developed, was made of wood, and the back frequently contained a tortoise-shell inlaid; the original vaulted back and flat sound-board, however, were retained; the latter was called *echeion*. The original arms, formed of the horns

of some animal (see Fig. 78), which were fastened to the side of the body, were called *kerata* (horns); and later, when wooden arms of a similar shape were substituted (see Figs. 79 and 80), the lower part was called *angkones*, and the upper, or fore-arm, which sepported the cross-bar, *pecheis*. The cross-bar, round which the strings were wound or fastened by a ring-shaped or other contrivance, was called the *zugon* (in Latin, *transtillum*); this cross-bar was oblique in the Egyptian lyre (see Fig. 49), and the strings, fastened to it by a noose, could be made to slide up or down to slacken or increase the tension. At first the lyres had no bridge, and the lower end of the strings was inserted into a cross-reed or tail-piece called *hypolyrios*, and secured by knots; as in the guitar, this reed served the double purpose of bridge and tailpiece, raising the strings above the soundboard and communicating to it their vibrations. The true bridge which is present in Etruscan and highly-developed lyres (see Fig. 81, p. 79 and Fig. 82) seems from its name *magas* to be of barbarian origin. Sound-holes were also a later addition to the lyre, and are to be found depicted occasionally in Etruscan paintings (see Fig. 82). The strings varied in number from three to twelve: in Fig. 34 is an example of a chelys with eleven strings found on a fresco at Herculanum; seven

Fig. 79.

Apollo's lyre; Zoega's "Die Antiquen Bas-relieven Rom's," pl. 98.

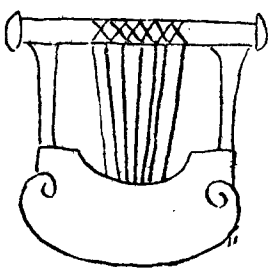


Fig. 80.

Lyre with short strings from Herculanum (Back View). Thos. Hope's "Costumes of the Ancients," vol. I., p. 87.

Fig. 82.

Etruscan lyre with bridge, sound-holes, tailpiece. From d'Harcanville's "Collection of Etruscan, Greek and Roman Antiquities, p. 109.

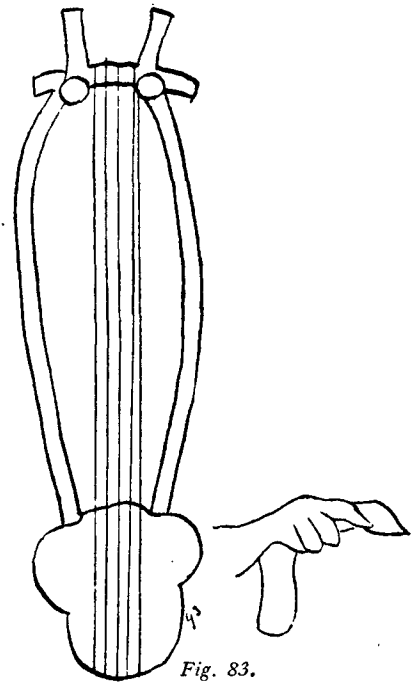


Fig. 83.

Long chelys lyre, low pitched, 5th cent. B.C. Brit. Mus., Third Vase Room, E. 378.

strings was the number most used; additional strings were not so much in request for extending the compass as to allow of using the different modes which formed the basis of the musical system of the Greeks, a description of which lies outside our present subject. The strings were all of the same length

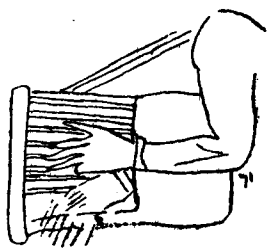


Fig. 84.

Asiatic Ketharah. Botte, "Monuments de Ninive," Tom I., pl. 67.

in the Greek lyre, but varied in thickness; each was played by a particular finger, the little finger not being used. The body of the lyre remained comparatively small, although the arms, and therefore the strings, varied in length according to the pitch of the instrument (see Fig. 83), which was always light and portable, as we know from numerous paintings on vases, in which women are depicted holding them out at arm's length with apparent ease.

CONSTRUCTION OF THE CITHARA.

The cithara differed from the lyre even in the crudest and earliest representations of the two instruments (see Fig. 84). All the Assyrian representations are of more or less primitive

citharas, which a superficial glance will show to be very different from any known specimen of the lyre.

The sound-chest of the cithara being the most important part of it, is also that in which developments are most noticeable; its contour varied considerably during the many musical ages, but the characteristic which foreshadowed the precursors of the violin and distinguished them from the other contemporary stringed instruments of the Middle Ages, was preserved throughout: it was a box consisting of a back and sound-board or belly *connected by sides of equal width.* The Kerata, or horns of the lyre, were absent in cithara, for its sound-chest included the arms or support for the *zugon.*

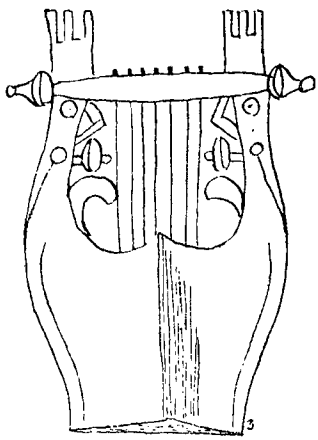


Fig. 85.

Back of cithara, shaped like a keel. Thos. Hope, "Costumes of the Ancients," Vol. I., p. 113.

The back of the instrument was sometimes like the keel of a boat Figs. 85 and 45) and at others there was a bulge in the middle (see Fig. 86); the latest development of all was a soundboard and back absolutely parallel and rectangular, with narrow ribs. With regard to the general contour of the soundchest in Assyrian illustrations, it was rectangular, with the lower corners rounded off; this shape, however, was much too clumsy and heavy looking for the æsthetic Greeks, and it was soon replaced by a soundchest wide across the centre and tapering towards the base (see Fig. 87); large instruments of this shape (similar to that in Fig. 95), with massive arms and transverse bar *(zugon),* are depicted in the hands of bards or professional

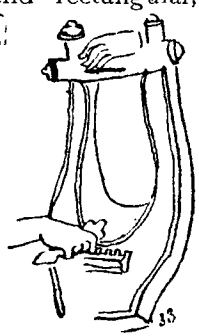


Fig 86.

Cithara with bulging back. Rome. Musco Capitolano. Clarac, Vol. III., pl. 490.

musicians on archaic vases at the British Museum, and in the Second Vase Room [case B, 345], dating from 520 to 480 B.C.,

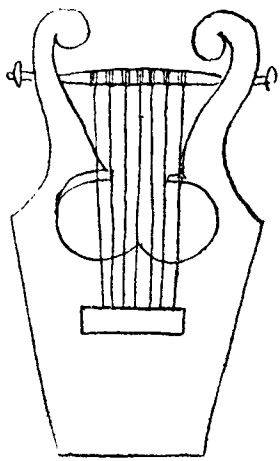


Fig. 87.

Cithara found at Herculanum. Thos. Hope's "Costumes of the Ancients," Vol. II., p. 192.

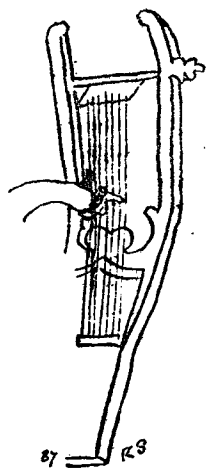


Fig. 88.

Cithara of Erato, from Herculanum. Clarac. Vol. III., p. 520.

there is a specimen on an amphora, with bridge, tailpiece and soundholes similar to those of the best Athenian period (480 to 450 B.C.). Later on this shape became more accentuated, and the base narrower: a great many delineations exist of this instrument taken from wall paintings and statues found in Herculanum (see Fig. 88). With the Etruscans the cithara was not such a favourite instrument, and the few examples we have are more squat-looking and compact than the Grecian (see Figs. 89 and 90). It must be borne in mind that the cithara, besides varying in name (of which more at the end of the chapter), also varied in size according to pitch; this again depended on the mode to which the strings were tuned, and each province had its favourite modes.

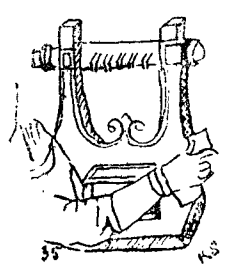


Fig. 89.

Cithara, Paris, Musée Royal. Clarac, Vol. III., p. 518.

From Plutarch ("Dialogue on Music," chap. vi.), we learn that in the days of Cepion, pupil of Terpander (seventh century B.C.), the shape of the cithara changed, and the box-tailpiece was added, of which there are several different kinds now on evidence; one of these on a cithara held by Terpsichore (see Fig. 91) looks like a box pure and simple fixed on to the sound-board. In Fig. 92 the tailpiece resembles a lid rather than a box, and the cithara itself has assumed the rectangular shape with which we are familiar from finding it so

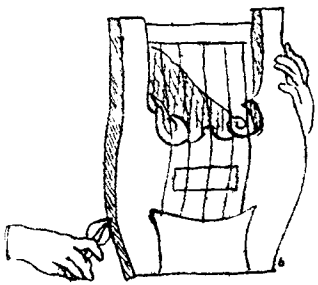


Fig. 90.
Cithara. Thos. Hope, Vol. I., p. 82.

Fig. 91.
Terpsichore's Cithara. Clarac, Vol. III., p. 267.

Fig. 92.
Erato's Cithara, Clarac, Vol. III., p. 353.

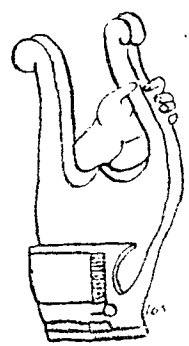


Fig. 93.
Erato's Cithara. Visconti. Mus., Clementino, pl. 22.

often in the hands of Apollo Musagetes or Citharœdus. Fig. 93 shows a box-tailpiece placed on a curved stand resting on the sound-board, and here the sound-chest is gracefully curved. Figs. 19 and 43, show boxes on hinges supported on the sound-board by means of two feet at each end. There is one circumstance which is very strange in connection with these citharas

with box-tailpieces, which can surely not be only a coincidence: not one of them has any strings indicated in the sculpture, and in some of them, as for instance Fig. 93, if correctly drawn from the statue, there could not have been any strings at any time, for the whole hand and arm are visible

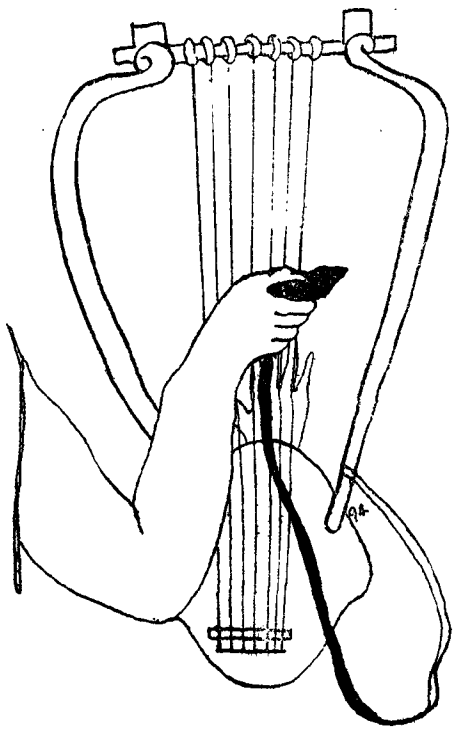


Fig. 81.

Chelys lyre with plectrum, bridge and reed tailpiece, 5th cent. B.C. Third Vase Room, Brit. Mus., E. 267.

across the space that would be filled by the strings; these in sculpture are merely indicated on the face of a solid piece of marble looking like a finger-board, behind which the hand cannot be seen; one must conclude, therefore, that the sculptor, seeing the impossibility of representing the strings, and yet

preserving the light and graceful appearance of the instrument, or else wishing to show the hand in preference, has purposely omitted them; from his point of view this is of course quite right, but it has deprived us of the means of studying the method by which the strings are attached to the tailpiece. From the indications of small hooks or bolts on some of the boxes, we may presume that the strings were fastened on the inside.

As in the lyre the strings of the cithara were all of the same length, pitch being determined by their thickness; they were attached to the revolving transverse bar by various contrivances already mentioned and illustrated in Chapter III., "Pegs." The strings, which, as will be seen, varied greatly in number at different times, were always arranged and added less for the purpose of gaining compass, than to enable the performer to play in the different modes of the Greek musical system. The cithara was suspended by means of an embroidered band or ribbon passed over the right shoulder, so that the instrument could be supported against the left hip or breast, leaving the right hand free for the treble, the left taking the bass; this band was called in Greek *telamon*, and in Latin *balteus*.

USES OF THE LYRE AND CITHARA.

It is evident to anyone who is acquainted with the vase and mural paintings and the sculptures of ancient Greece, that the lyre and cithara played totally different parts in musical life: we find the lyre in domestic circles, in lessons, receptions, at banquets, or in mythological scenes; it is found in the hands of women no less than men, and the costume of the performers on the lyre is that of an ordinary citizen of the time (see Fig. 82); in fact, the lyre was the instrument of the amateur, and did not make any very great demand upon the intellect or skill.

On the other hand, the cithara was the instrument of the professionals; its technique was extensive and difficult to acquire;

its use was two-fold: (1) to accompany the voice—this being placed by the Greeks far above mere instrumental music; (2) for solos, dance-music or pieces to play at trials of skill, at the national games, and at the receptions of the rich, at which *virtuosi* performed then as they do now at our fashionable at-homes, with this difference, that before the decadence in Greece, music was too serious and sacred an art not to command full attention, and it was used as an accompaniment to songs and hymns, but not to the desultory conversation of a fashionable gathering.

COSTUME.

The costume of the professional *citharædus*, as the performer was called if he used the cithara to accompany his song, or *citharista* if he used it for instrumental music, was exceedingly rich and quite distinct from any other (see Auctor, ad Herennio, lib. iv., 47, 60, and Apuleius, Florid., 2, 15); he wore a *palla* or long tunic with sleeves, embroidered with gold, which was girt high above the waist and fell in graceful folds to the feet; the palla of the citharœdus must not be confounded with the garment of the same name worn by women, which was a mantle. Over one shoulder, or hanging down the back, was the purple *chlamys* or cloak (see Fig. 94), and he wore a golden wreath of laurels.

Fig. 94.
Apollo Citharœdus, Visconti. Mus., Clementino.

As all representations of these professionals, so easily recog-

nized by their dress and laurel wreath, bear the characteristic instrument described above, and never one of the lyre type, we may consider this is an additional proof of the identity of the cithara.

Fig. 95.

Citharœdus, showing the Palla and Chlamys. From d'Harcanville's Collection of Greek, Roman and Etruscan Antiquities.

This distinctive costume varied little from the palmy days of Greek music (see Fig. 95) to the time of Nero, who was a great patron of music. At the time of the burning of Rome, it is recorded that he was singing "The Destruction of Troy," accompanying himself on the cithara. He was fond of dressing up as a citharœdus, and of being represented in that character on medals; Fig. 96 is a copy of one of these. (See Suetonius, "Nero," cap. 25).

CITHARŒDES.

Although even the briefest summary of the History of Greek Music would be out of place here, a few facts and anecdotes relating to the citharœdes may prove interesting.

This record, extending over more than thirteen centuries, falls naturally into two divisions: the mythological, from the thirteenth century B.C. to the first Olympiad, 776 B.C., and the historical, from 776 B.C. to the days of Ptolemy, 161 A.D. Yet there are reservations in this division, for tradition takes us back by occasional allusions to periods beyond the veil, and the historical period is set in a framework of mythology. In the thirteenth century B.C. took place the conquest of the Peloponnesus by Pelops, leader of the Lydians, who with the Phrygians were descendants of the first Aryans who peopled Asia Minor; the *pectis*, a stringed instrument of the cithara tribe, was probably then introduced by them to the Greeks (see Athenæus, 14, c. 5). Herodotus also testifies to the Asiatic origin of the instrument in his account of the march of Alyattes, king of Lydia (sixth century B.C.), father of Crœsus, and his army against Miletus to the sound of the syrinx, pectis and flutes.

Fig. 96.
Nerone Citaredo, Visconti, Mus., Clementino.

In the same century the sovereign power of music to soothe, inspirit and touch the heart is symbolized by the legendary history of Orpheus, who encouraged the heroes on the Argonaut expedition by his war-like songs and music, besides bending the powers of Nature and Hades to his will by the music of his lyre. The legend of Amphion building the walls of

Thebes by his magic playing, is but another tribute to the power of rhythmical music. Apollo, the leader of the Muses, was also the god of music and poetry and as such was surnamed Musagetes and Citharœdus, and was celebrated in poems, sculptures and paintings innumerable; he was considered to represent that art of music which appeals to the mind and soul of man, and is potent to allay pain, to ennoble, and to educate; whilst Dionysus (Bacchus) inspired emotional, sensuous music, which excited, maddened, and led to the Bacchanalian orgies: in memory of his sad fate arose wild laments and outbursts of passionate sorrow. In the twelfth century B.C. occurred the events which inspired the immortal Homer, and Achilles stands out as the only singer and performer on stringed instruments alluded to among the warriors who besieged the luckless Troy. Achilles' instrument is sometimes called phorminx, and at others cithara; these were probably the large and low-pitched instruments similar to that in Fig. 95, which would be the most suitable for accompanying heroic songs and epic poems; the word *lyre* occurs neither in the Iliad nor in the Odyssey. Achilles comforted his heart, we are told, with a phorminx which had a bridge of silver, and stimulated his courage by singing the deeds of the heroes (Iliad ix., 188). The Iliad and Odyssey are a mine of wealth to musical historians, and contain evidence of the wide-spread practice of the art, and of its intimate relation to man in all conditions and at all times.

At the beginning of the tenth century B.C. the celebrated national games, Olympian, Nemeian and Pythian, were established, and the latter was specially devoted to musical contests, which at first consisted of festival songs accompanied by rival instruments, chiefly oboes and citharas; the oboists or *auletes*, laboured under the disadvantage of not being able to sing and play at the same time. The prize was a simple laurel wreath, but the honour was great.

With the period immediately preceding Terpander, who flourished in the seventh century B.C., we enter the realms of history. Round this great composer, poet, theorist and instrumentalist there gathers a halo of traditions, in addition to the known facts, which, treated allegorically, seems to point to his descent from a long line of bards. Terpander, a native of Lesbos, founded the great Lesbian school, which counts among its pupils, Cepion, Arion, Alcæus and Sapho; the chief scene of his labours was, however, Sparta, where he taught about 640 to 630 B.C., and composed his celebrated melodies called *Nomes*, which the Spartans found so inspirating that they looked upon the master with the greatest reverence. On one occasion, when dissensions and quarrels arose among them concerning the spoils from the Messinian War, the Delphic oracle announced that "not until Terpander's cithara sounds will contention cease in Sparta." This oracle was actually fulfilled when, under the influence of Terpander's singing and playing, the disputants were reconciled. Terpander is said to have increased the strings of the cithara from four to seven, which long remained the perfect number in Sparta, who strenuously resisted all attempts to break through the canons of Terpander.

Arion's story (*circa* 620 B.C.), like Terpander's, is a curious mixture of fact and myth; his reputation as citharœdus no doubt caused much jealousy, and his proven superiority over the citharœdes of Tarentum gave rise to the well-known fable. There is a very quaint miniature (see Fig. 97) in a Bestiarium of the fourteenth century, an English MS., Sloane 3544 (Brit. Mus.), showing Arion seated in a very diminutive ship charming the so-called dolphins by playing on a hurdy-gurdy. The myths of ancient Greece were frequently used during the middle ages to glorify the favourite musical instrument of the day.

Sapho (*circa* 560 B.C.), the Lesbian poetess, has been ac-

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credited with the invention of the barbiton, a stringed instrument (of which more will be said at the end of the chapter) of barbaric origin, as its name indicates, and unknown to the Greeks, as far as we can tell, until her day. Sapho, who in her school at Lesbos trained innumerable maidens of noble birth

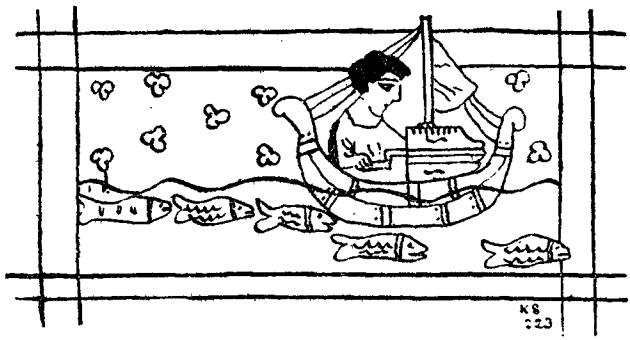


Fig. 97.
Arion charming the dolphins with a hurdy-gurdy. From Sloane MS. 3544 Brit. Mus. 14th cent.

in dancing, singing and gymnastics, seems to have chiefly used a lyre of six strings. Pythagoras, the greatest name in Greek musical history, made the daily use of the lyre morning and evening the rule for himself and his pupils, and was a strong believer in the power of music to subdue the passions and even to cure madness, an idea likewise held by Goethe many centuries later.

Pindar, the greatest lyric poet, was also a celebrated composer, and one of his Pythian odes has been preserved and deciphered, Böckh vouching for its authenticity; the opening bars of the solo, in which the phorminx of Apollo is mentioned, are given in Fig. 98; the solo is followed by a chorus for citharœdes.

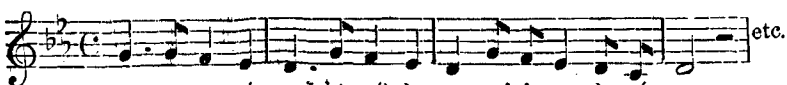


Fig 98.

The solemn games and processions called Panathenæ,

held every four years in honour of Athene, which used to consist principally of athletic sports, horse and chariot races, were under Pisistratus (about 540 B.C.) greatly extended, and made to include contests of singers and instrumentalists, recitations of portions of the Iliad and Odyssey by citharœdes, such as are represented on the frieze of the Parthenon (see Elgin Room, British Museum), and later on friezes by Phidias. It was also at that time (550 B.C.) that the first contests for citharistas, or solo players on the cithara, and for auletes were instituted at the eighth Pythian games. The golden age of music was fast approaching, and these contests smoothed the way. Pisistratus was a great patron of the festivals held in honour of Dionysus in Athens in the spring, in which the singers of the dithyramb accompanied their song with pantomimic action, celebrating the god of the joys of life; these, and the more solemn festivals when the mystic goat was sacrificed, and the sorrows and painful death of the god were sung, eventually brought about the glorious drama, at whose shrine we worship to-day in the works of Richard Wagner.

In the time of Pericles (478 to 429 B.C.) the beauty of the drama reached its height with Æschylus (525 to 456 B.C.), and the cithara was glorified with it. Just as instrumental music in the middle ages originated in the regenerated drama of the sixteenth century, so the rise of virtuosity followed the growth of the Greek drama, and became the sign of the decadence which came when the soul of music and its message to men became of less account than the dexterity of the fingers; the worst is that this was but the outward sign of the canker that was eating out the heart of this great and glorious nation, and which led to its ultimate ruin. This passing reference to the drama must suffice, for we must not lose sight of the cithara. Pericles, who lived among such giants in the arts as Phidias, Æschylus, Sophocles and Euripides, was by no means an unworthy patron of the tonal art; besides the noble Parthenon

and Propylæ, he had the Odeion built for musical and poetical contests. In 456 a great virtuoso, Phrynis, the citharœdus and citharista, distinguished himself by his wonderful execution and his scale passages in single and double notes: although the people were enthusiastic over this skill, the critics of the day shook their heads, missing the true spirit which used to elevate and ennoble. Phrynis added a ninth string to the cithara (see Fig. 99), which enabled him to play in two modes

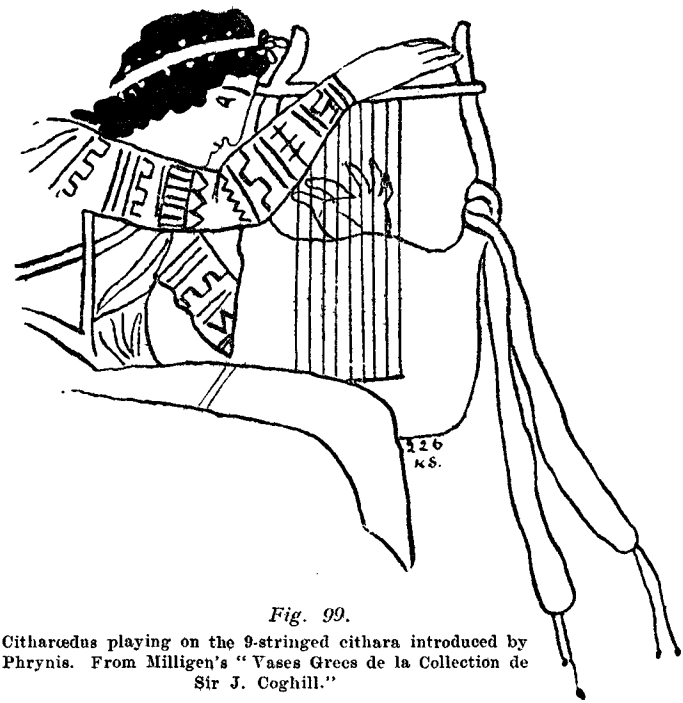


Fig. 99.

Citharœdus playing on the 9-stringed cithara introduced by Phrynis. From Milligen's "Vases Grecs de la Collection de Sir J. Coghill."

without re-tuning the instrument; he was made much of in Athens, but a visit to Sparta, where he intended to create a sensation with his improved technique and new instrument, brought him a severe rebuke from the Lacedemonians, who were faithful to Terpander's classical style and seven-stringed cithara. This *zopf* in instrumental music spread in time to

singing, and the *coloratura* style became popular; *virtuosi* vied with each other in producing more and more wonderful effects, which the people rushed to hear; statues were erected in honour of singers, auletes, dancers, actors, and personality received the worship and honour due to Art. This superficiality and striving after effect was severely criticized and satirized, among others, by Aristophanes in his comedy "The Clouds."

Alcibiades was passionately fond of music, and was a great amateur citharœdus. Plutarch tells us, in his "Life of Alcibiades," that in the course of his education he willingly took lessons in all but the aulos, which he refused to learn to play, looking upon it as a mean art, unworthy of a gentleman. "The use of the plectrum upon the cithara," he would say, "has nothing in it that disorders the features or form, but a man is hardly to be known by his most intimate friends when he plays upon the oboe. Beside, the cithara does not hinder the performer from speaking, or accompanying it with a song," &c.

Histæus, of Colophon, added a tenth string to the cithara, and Timotheus, the Elder of Miletus (446 to 357), added the eleventh.

As Timotheus exercised a great influence on the music of his day, making many innovations, a little sketch of his career may prove of interest. He was a famous *virtuoso* as well as a citharœdus and composer, and he may be said to have formed his style on that of Phrynis (likewise a native of Miletus), whom he excelled on one occasion at a musical contest. Euripides, who, however, it must be remembered, was no musician, and did not himself compose the music for his tragedies, was much struck with the virtuosity of Timotheus. When the latter was hissed on his first performance at Athens by an audience whose taste he had offended by his bold innovations and by the increase of strings on his cithara, Euripides predicted for him a brilliant future.

We find that he delighted in intricate passages and forms,

"windings like the passages in ant hills" (Plut., "De Musica," 30, p. 1141 f.); he moreover cultivated instrumental music more than any preceding musician, making great use of the chromatic scale. Timotheus may be called the originator of programme music, for he tried to make his music imitative, seizing on the points of the mythical stories which admitted of imitation, such as raging elements, cries of men and of beasts, and neglecting the ethical side entirely. Timotheus, in common with some of the *virtuosi* of our day who do not disdain to play music written for other instruments, played on the cithara music written for the aulos, and he was the first to entrust the singing of the Nomes to a chorus instead of to a soloist. Judged by an æsthetic standard he fell short, but he enjoyed great popularity, as an instance of which may be mentioned that he received a thousand pieces of gold from the Ephesians for his hymn to Artemis (Diana). He did not profit by the experiences of Phrynis at Sparta, confidently going there to exhibit his skill to the severe classicists at the Carneian musical contests; one of the Ephori, however, snatched from him his cithara and indignantly cut the four strings which were in excess of Terpander's canon, then, as a warning to future innovators, he confiscated the mutilated instrument, which Pausanius tells us, he saw hanging on a peg in the Scias (III., 12, sec. 8). Timotheus composed eighteen books of citharœdic nomes, eighteen dithyrambs, twenty-one hymns, and some encomia. A few fragments of these are extant.

We now come to a time when there were two distinct parties in the musical world of Greece, and the glorious drama which opened out such infinite possibilities for the furtherance of the art of music, actually may be said to have sown the seeds of the decadence which led to the ultimate ruin of the art, because the people became degenerate and demoralized. This was also the great age of philosophy, and the great minds of Plato, Aristotle, and Socrates foresaw that in giving free reins to the emotional

in music, the power of elevating the mind and encouraging the love of intellectual beauty and harmony would be lost; this tendency was, however, not what the philosophers most deplored, there was something infinitely worse—the reign of virtuosity was at hand. The craving for greater compass and a larger number of strings, innocent and laudable enough in itself (for we cannot hold with the extreme conservatives of Sparta), was a pregnant sign of evil in this case, because these greater facilities were misused and music was neglected for the superficial pleasures of dexterity of the fingers. The futile, meaningless music of the *virtuosi* tickled the ears of the unreflecting masses, and the citharistas vied with each other in producing more and more wonderful effects, and in scoring triumphs over each other, not of pure skill, but for having secured the favour and applause of the masses and their rich rewards.

Plato (430-347 B.C.) must not be omitted from our list of citharœdes, for when a mere youth he contended at the Isthmian and other games, and composed epic, lyric and dithyrambic verses before he turned his attention to philosophy under the tuition of Socrates (Diogenes, Laert. III., 4, 5; Aelian, V. H. II., 30; Plato, Epistle VI.). Like Plato, Aristotle threw the whole weight of his influence against virtuosity, believing that it was injurious to the welfare of the state, whereas it was really only the outward sign of the evil which was even then threatening Greece. Aristotle's taste was by no means so severe as Plato's, and he recommended all music that was graceful and elegant; he advised his pupils to use great discrimination in the choice of instruments, holding that those of which the technique was difficult and complicated were best left alone, and that the use of those with many strings, like the citharas of Aristoxenus and Timotheus, the trigonon, epigonion, etc., could not fail to prove pernicious in their influence on mind and morals. Aristotle, when tutor to Alexander the Great, had a new version of

the Iliad prepared for him, to be sung to the cithara with at most seven strings. The father of the young prince, Philip of Macedon, was surrounded with poets and musicians, who flattered him most shamelessly, debasing their art and making music which was only sensuous. Alexander himself was accompanied on his warlike expeditions by bards, and on the occasion of his marriage to Statira at Susa (B.C. 324), a number of celebrated Greek musicians, citharœdes, were invited to assist in the festivities; amongst these were Timotheus the younger, Aristonymus, Cratinus, Heraclitus and Athenodorus of Teos, a celebrated citharista.

Aristoxenus (B.C. 350), a pupil of Aristotle, who wrote two treatises, one on "Rhythm," of which a fragment remains, and the second, "The Elements of Harmony," in three volumes still extant—was opposed to the theories of Pythagoras founded on numerical ratios. Aristoxenus recognized no guide but the ear; the followers of the former were called *canonists*, and of the latter *harmonists*. We are chiefly concerned with Aristoxenus in his character of instrumentalist, for he is said to have further added to the strings of the cithara, raising the number from fifteen to eighteen; if this be true, he must have diverged very greatly from the teaching of his master Aristotle.

Alypius, whose date seems difficult to fix, is thought by some to have lived in the second century B.C. Be that as it may, he has left us a valuable and interesting work indicating the symbols used for voice and instruments of all the sounds in the forty-five scales. Euclid, about 200 B.C., Diodorus Siculus, contemporary of Julius Cæsar, Plutarch (49-120 A.D.), Ptolemy (60-139 A.D.) have all furnished information on musical subjects and instruments.

VARIOUS MUSICAL INSTRUMENTS.

Many stringed instruments are known to us by name from numerous classical references, and these are frequently mentioned in such a manner by the writers, if Greeks of Hellas, as to

show that the fame of these instruments had reached them from afar, but without details; on the other hand, writers from the Greek colonies in Asia Minor, whence came most of the instruments mentioned below, refer to them familiarly, but do not describe them, doubtless because they were so well known in their country. We gather most of the few facts we know on the subject from Atheneus, an Egyptian born at Naucratis about the beginning of the third century A.D.; he was a writer of great erudition, and in the "Deipnosophists," or Banquet of the Learned, quotes many writers whose works are now lost. The Greeks of Hellas may be said to have used only the lyre and cithara, and did not by any means rank as the most musical in Greece; that distinction belongs rather to the colonies of Asia Minor (Lesbos, Lydia, Phrygia, &c.), Great Greece (Italy), Sicily and Egypt, to whom the real progress of instrumental music is due. Hellas may have become acquainted with instruments of many strings after the conquests of Alexander the Great, but the epigonion excepted, not before. The names of the instruments seem to have been hopelessly confused by various classical writers, and applied to totally different specimens; this is hardly strange seeing that most of them were only known to them by name. It must be remembered that throughout the history of music the same instrument was frequently to be found with a varying number of strings at different periods, so that we need not feel puzzled when writers do not agree on this point.

The citharas and lyres were known by different names, for reasons which in most cases we can but conjecture.

THE PHORMINX.

The word phorminx as far as we know occurs first in Homer, where it is used as a synonym for cithara, as will be seen from the following lines quoted from the Odyssey (Canto I.), "A herald presents a *cithara* to Phemius, who constrains himself to

sing before the suitors. He plays a prelude to a melodious song on the *phorminx*." A quotation from the Iliad (Canto XVIII.) corroborates this, and at the same time shows the supposition that the phorminx was a large cithara to be improbable; the instrument was probably made in different sizes. "A phorminx was borne by a young boy, who joins his melodious voice to the harmonious sound of his cithara."

Classical authors agree in saying that the sound of the phorminx was sweet and sympathetic, and eminently suitable to accompany the voice. Euclid, in his "Introduction to Music," quotes Terpander on the subject of this instrument: "But we, loving no more the tetrachordal chant, will sing aloud new hymns to a seven-toned phorminx." These lines are also quoted by Strabo (p. 169). Terpander, we hear from Plutarch, (De Musica) won the prize with this instrument at the first musical contest which took place at the feast of Apollo Carneius at Sparta, and he was victor four times in succession at the Pythian games, singing his own epic verses as well as Homer's.

THE PECTIS.

The pectis was a Lydian instrument, said to have been introduced to the Greeks by Pelops in the thirteenth century B.C., according to Atheneus (Lib. XIV., c. 5), who also says that it was a small instrument with shrill notes. Sapho (22nd fragment) endorses that statement. Herodotus also testifies as to its being a Lydian instrument; as the Lydians played on citharas principally and did not use the lyre, we may believe that the pectis was a small variety of the cithara. With regard to the number of strings, Plato classes the pectis with the polychorde (Rep. Lib. III., p. 399). Sopater (323-283 B.C.), a parodist of Paphos, who spent much time at the Court of Alexander the Great, assigns to it but two strings in his burlesque, "The Initiated," quoted by Atheneus (Bk. XIV.) "The pectis proud of its barbaric muse with its two strings, was placed

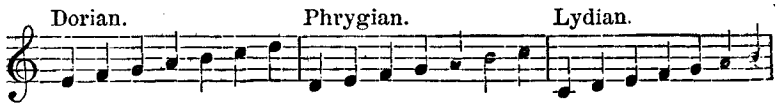
within my hand." Diogenes (about B.C. 404), a tragic-poet of Athens, in his tragedy, "Semele," gives the shape of the pectis as triangular: "Striking the clear three-cornered pectis, and raising responsive airs upon the magadis." It is probable that Diogenes, being an Athenian, knew little about the instrument, and had in his mind the Phrygian trigonon.

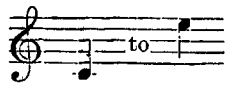
ENNEACHORDON.

This, as its name denotes, was an instrument of nine strings, and is probably neither more nor less than the nine-stringed cithara of Phrynis (see Fig. 99).

MAGADIS.

This name is of barbaric origin, and the term magas applied to the bridge of the cithara and lyre by the Greeks was probably derived from the magadis, a Lydian instrument of twenty strings or tones, probably a kind of cithara, since Anacreon (B.C. 540), a native of Teos in Asia Minor, who should be a good authority on the subject, and also Menaechmus of Sicyone, who lived in the time of the successors of Alexander the Great, of whom he wrote a history, both clearly state that it is the same instrument as the pectis. As the strings are all of the same length on the cithara, it is difficult to understand how thickness and tension alone could produce so many different notes; it seems to me that the magadis may have been an instrument of ten strings, with a second bridge or fret against which the fingers stopped the strings half-way, thus producing the octaves of the notes at will; this seemed all the more probable because to magadise was a well-known term for *playing in octaves* with another instrument; we must also remember that the use of finger-boards and frets had been known for centuries in Egypt and Assyria. Atheneus (XIV., c. 8, p. 617) quotes Anacreon: "O Leucaspis, I sing sounding my Lydian

magadis with twenty strings." Now, Anacreon mentions the three modes, Dorian, Lydian and Phrygian, in which music

was written in his time, and possibly his magadis was tuned so that he could play in the three scales without re-tuning; this would require only ten strings from



which would agree with my supposition that the other ten tones were produced by means of a fret bridge. Atheneus quotes a description of a wonderful instrument which Artemon (*circa* B.C. 300) calls the tripod of Pythagoras of Zacynthus, because in shape it resembled the Delphic tripod: this instrument was a revolving triple cithara; it was composed of three complete instruments joined by their sides, of which one was tuned to the Dorian, another to the Lydian, and the third to the Phrygian scale; this triple instrument was fixed on a revolving pedestal. Pythagoras sat before it on a chair, steadying the instrument with his left hand and holding the plectrum in the right, and played first on one side, then dexterously turning the instrument with his foot, he continued on another side as the music demanded, using such agility of finger and execution that any one hearing without seeing would have fancied he was listening to three players on different instruments. This tripod, although so much admired when played by Pythagoras, fell into disuse after his death, probably on account of the intricacy of its technique, and so it escaped the notice of many writers. The Delphic tripods were dedicated to Apollo, and formed one of his attributes, and as Apollo was the reputed inventor of the cithara, according to

Greek traditions, there seems to be a suitableness and meaning in the construction of this tripod cithara; moreover, tripods of bronze were frequently given as prizes at the Pythian Games and other contests.

There are many more quotations to be found in Athenæus in which the magadis is mentioned; sometimes it is described as having five strings, at another it is said to be a Lydian flute, from which I am inclined to think that the name is generic, indicating those instruments on which the octaves can be produced.

THE BARBITON.

The barbiton was also a barbarian instrument, as the name seems to indicate, *barbat* being the name of a Persian stringed instrument, a lute or harp (Johnson's Persian, Arabic and English Dictionary); Theocritus calls it an instrument of many strings (that is to say more than seven). Pollux (Onomasticon iv., c. 9, No. 59), calls it a barbiton or barymite (from *barus*, heavy, and *mitos*, string), that is to say, with deep sounds; the strings were twice as long as those of the pectis, and sounded an octave lower; one could magadise on the two instruments, as Pindar tells us (Athen. xiv., c. 9, p. 635) in the same line wherein he attributes the introduction of the instrument into Greece to Terpander. Anacreon in his first ode sings that his barbitos only gives out erotic tones.

THE SAMBUCA.

Even less is known of this instrument than of the preceding; its invention has been attributed to Ibycus in the sixth century B.C.; he may have introduced it to the Greeks. The sambuca, or sabuca, is undoubtedly the Phœnician sabecha, and perhaps the same as the lyrophœnix; its tone was very shrill, like that of the pectis, and it had four strings, according to some writers. Euphorion, in his book on the Isthmian Games (Athen. xiv.) tells us that it was used by the Parthians and Troglodytæ.

Andreas of Panormus (*ibid.*), in his History of Sicily, says that the military engine sambuca was named after the instrument whose shape it resembled, being like a ship and a ladder joined together: the description is too vague to help us much, although some Egyptian harps would answer to this description; indeed, any instrument with a resonant box at the base and strings rising from it perpendicularly might, by a stretch of imagination,

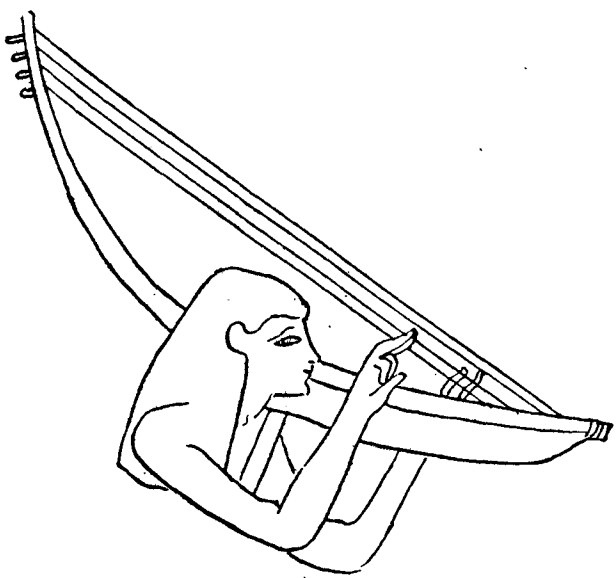


Fig 100.
Instrument of the harp-lute description found on a tomb at Thebes-Kourna, Champollion.

answer to the above simile. The instrument, mistranslated *sackbut* in the book of Daniel (ch. iii. 5), is in the original Chaldee *sebeka*, no doubt the instrument in question, which was of Assyrian origin. The sambuca is sometimes described as triangular, and at others boat-shaped, and was possibly similar to the primitive small Egyptian harp-lute instrument (see Fig. 100) called nanga.

THE EPIGONEION.

This instrument was invented, or at least introduced into Hellas, by Epigonus, a Greek musician of Ambracia, who was admitted to a citizenship at Sicyone. The epigoneion had 40 strings (Pollux Onomasticon, Lib. iv., cap. 9, sect. 2). It was probably a harp or psaltery, since in an instrument of so many strings some must have been of different lengths, for tension and thickness only could hardly have produced forty different sounds; strings of varying lengths require a frame, like that of the harp or of the Egyptian Kithara (see Fig. 165); or, in the case of the psaltery, a harp-shaped arrangement of the bridges.

Juba, or Jobas, the learned king of Mauritania, who flourished in A.D. 63, declares that Epigonus brought the instrument from Alexandria, and played upon it with the fingers of both hands, not using it only as an accompaniment to the voice, but introducing chromatic passages, and a chorus of other stringed instruments, probably citharas, to accompany the voice. Epigonus was also a skilled citharista, and played it with his bare hands without plectrum (Athen. iv., p. 183 *d*, and xiv., p. 638 *a*). Had we the means of ascertaining when he lived, his career would have proved an interesting addition to our list of citharœdes.

THE SIMMIKION.

All we know about this instrument is that it had 35 strings, and that its invention was attributed to Simos, about 600 B.C. (Pollux, *ibid.*)

THE PSALTERION.

This instrument derived its name from the Greek *psallo*, to twitch, pull, and let go again, to twang a bow string; the term was applied in the 6th cent. B.C., to the hair (Æschylus, Persai, 1062) in the 5th cent. B.C., to the bow (Euripides, Bacchæ, 784), and in the 4th cent. B.C., for the first time to a musical instrument of which the strings were twanged with the fingers instead of a plectrum. (Sse Liddell and Scott, Greek Lexicon).

The psalterion consisted of strings stretched over a sound-board during the middle ages, and even in the days of St. Jerome and San Isidore of Spain, both of whom refer to it in their writings; and we may assume that the same characteristic was present in its earliest form, since it was probably identical with the Chaldean *pisantir*. Some writers have thought that the inscription, "Erato Psaltrian" (Fig. 88) on the base of the statue of the muse found at Herculanum, who is playing a large cithara, showed that the instrument was a psalterion or psaltery, whereas psaltrian simply indicates that Erato is playing a stringed instrument and twanging the strings. It is evident from the words of Juba (see above, "Epigoneion") that in his day, in the first century of our era, there were two kinds of psalterions, an upright and a horizontal. Atheneus (iv. c. 25, p. 183) says that Alexander of Cytheria completed the number of the strings of the psalterion, and afterwards, having grown old in Ephesus, he consecrated his ingenious invention to Diana in the Temple.

THE SKINDAPSOS.

This instrument, like so many of the others, is little more than a name to us. From the epic poet Theopompus (380 B.C.), we know something of its construction; "Sounding a large skindapsos of maple-wood inlaid with tamarisk, similar to a lyre" (Athen. xiv.). As the instrument was large, its strings must have been long and have produced deep tones; the strings were four in number, the parodist Matronus (5th and 4th cent. B.C.) tells us: "Nor did they hang it upon pegs where hung the sweet skindapsos with its fourfold strings, joy of the woman who the distaff hates" (Athen. xiv.). Anaxilas, an Athenian comic poet, contemporary of Plato, from whose work "The Lyre Maker," Atheneus quotes, informs us: "I was making three-stringed barbiti, pectides, citharae, lyres and skindapsi." Unfortunately, this treatise is not extant; it would have proved of great interest to us, and would doubtless have

cleared up many obscure points in the history of musical instruments. The derivation of the word in Greek is not known.

TRIGONON.

The trigonon was a sort of early triangular harp, and has nothing to do with the precursors of the violin.

PANDOURA, OR PANDURRA.

This instrument, evidently little known in Greece, had been introduced from Asia; it usually had three strings (Pollux, Lib. iv. 60), and had we not evidence from other sources, we should know little about it from the Greeks. It is evidently the tamboura of the Assyrians, Persians and Arabs, a sort of lute with a vaulted back, a long neck, with or without frets, and a flat sound-board. It is similar to the Egyptian instrument found by Mr. Madox (Fig. 101), or that in Fig. 102, from a painting on the third tomb at Thebes Kourna. We shall find this instrument again in the middle ages under the name of Panduria, Banduria and Tambor, the latter in the Moorish enumerations of musical instruments. In the "Cantigas de Santa Maria," a manuscript of the 13th century in the Escorial, which has several times been mentioned, are several miniatures of performers on this instrument, which will be given later (see Riaño on "Early Spanish Music"). In the British Museum there is, in the mausoleum annexe, a sarcophagus assigned to the reign of Hadrian, on which is depicted an instrument answering to the above description in all but the number of strings, which is four (see Fig. 25).

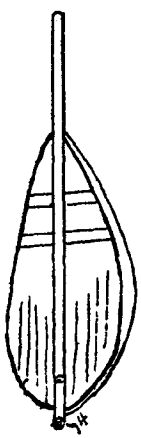


Fig. 101. Sort of tamboura. Sir Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians." Vol. I., p. 483.

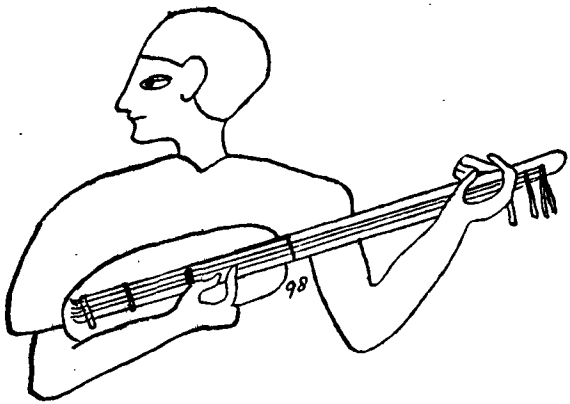


Fig. 102.

Egyptian nefer or tamboura. Champollion, Tom. ii., pl. cvii.

This concludes the list of the principal stringed instruments mentioned by Greek writers.

CHAPTER VI.

Stringed Instruments among the Romans.

The Romans inherited their knowledge of the arts from the Greeks, but their treatment of them differed greatly from that of the Hellenes; the Romans were realists in art, whereas the Greeks were idealists. The warlike instincts of the former influenced their cult: Mars was placed by them far above Apollo and the Muses, hence the fondness of the Romans for wind instruments of a martial character, which, however, they did not invent, but only improve. The Romans obtained all their musical instruments from the surrounding nations; stringed instruments were comparatively little used by them, and apparently not until close upon the commencement of our era. The earliest references to the lyre occur in Horace (B.C. 65 to 8), when he sings: "The dorian notes of the lyre will harmonize with the mixolydian tones of the flute" (Horace ad Mecænat, Epod. ix.).

The word *cithara* seems to occur first in the writings of Varro (116 to 28 B.C.), a bibliophile, who enjoyed the favour of Augustus; he contributed enormously to the literature of his day, for it is computed that he wrote no fewer than 490 books, of which only two are extant, "De Re Rustica" and "De Lingua Latina." We must not conclude that the instruments were unknown to the Romans until that period; the reason for the omission lies partly in the fact that the instruments do not

seem to have been very generally used until the first century A.D., when the study formed part of the education of noble maidens, the other reasons are related to the style of the literature. Virgil mentions both lyre and cithara repeatedly; it will be sufficient to quote two passages: "If Orpheus had been able to summon the shades of his wife, by the power of his Thracian cithara with melodious strings" (Æn. vi. 120); this reference shows us to whom the Romans attributed the origin

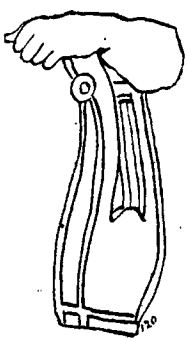


Fig. 103.

Back of a Roman cithara, held by Nero Citharoedo. Mus. Pio Clem. Tom. iii., Tav. iv.

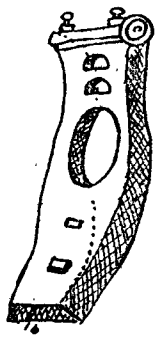


Fig. 104.

Highly developed Roman cithara of the Lycian Apollo. Rom. Mus. Capit. Tom. iii., Pl. 13.

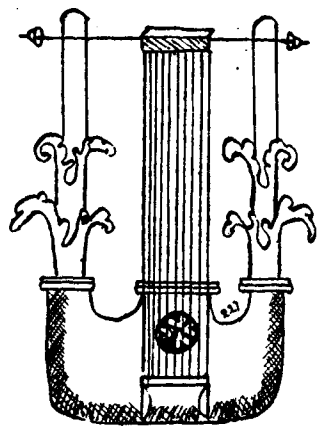


Fig 105

Ten stringed instrument with characteristics of both lyre and cithara. Heliac Table, Montfaucon. Sup. i., Tab. 32

or introduction of the instrument: "The bard Iopas, with flowing locks, sang to his cithara ornamented with gold, as instructed by the lore of the great Atlas" (Æn. i. 740).

The citharas we find represented on Roman sculptures bear evidences of high development, probably attained in Greece, and introduced to Rome by the numerous musicians who flocked to the capital of the world. The rectangular shape that we have observed in Figs. 18, 43, 94, &c., is the dominant one: the back and belly are flat, as in Fig. 103, a cithara held by Nero in one of the representations of him in the character of Citharoedus; this clearly fixes the date of the instrument depicted some-

where in the first century A.D. We observe that the sound-chest becomes more and more compact, and at last we find a specimen, shown in Fig. 104, of which the sound-chest is narrow, and extends, but for one large round hole and two small semicircular ones carried right through the sound-chest, from base to transtillum without arms; a tail-piece and bridge are indicated, and they are so narrow that the instrument could have had but three or four strings at most; this example has been restored (the restored portions being marked by a dotted line), but enough of the original remains to show conclusively what the form was. This seems to be the first step in the transition from cithara to guitar-fiddle, which will be treated in the next chapter.

In Fig. 105, from the Heliac Table in Palazzo Maffei, Rome, we have an instrument partaking of the nature of both lyre and cithara. The sound-board, which is delicately arched, presents a certain affinity in that respect with that of the violin; the sound-chest is that of a cithara, the arms are those of the lyre; there are ten strings attached to a tail-piece and stretched over a bridge placed on the upper edge of the belly; there is an elegant rose sound-hole placed in the centre. This instrument presents a certain resemblance to the crwth or rotta in Fig. 115. Apollo's lyre, seen in Fig. 106, is still more extraordinary, there appear to be six strings, and hardly any sound-board, in which respect this lyre very much resembles the Indian sarinda.

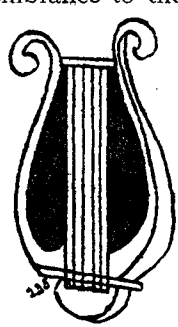


Fig. 106.
Apollo's lyre. Montfaucon, Sup. Tom. i., Pl. 31.

Glancing at another cithara (Fig. 108) taken from a sarcophagus now in the Louvre (also given in Fig. 26), and assigned to the second century A.D., it would seem to possess similar characteristics to that seen in Fig. 104. Finding that the drawings differed so widely according to different authors, it was judged ad-

visable to write to the curator of the Musée du Louvre for information on the subject of the instruments, which are of great importance to us students of their history. A photograph (see Fig. 108) has been specially taken for this work

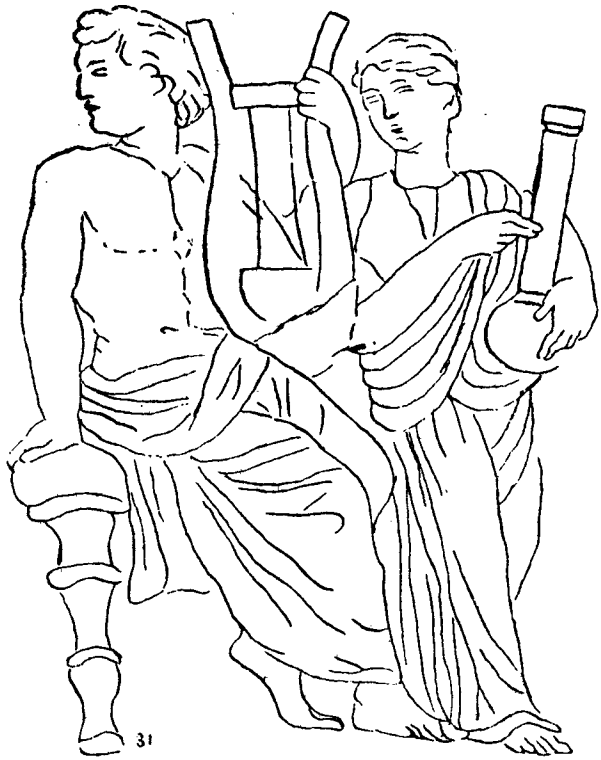


Fig. 107.

From a sarcophagus in the Louvre (see Fig. 26) From "Monuments d'Antiquité figurée." Raoul Rochette, Paris, 1838.

through the courtesy of M. A. Héron de Villefosse, Curator of the Musée du Louvre, who at the same time supplies the following information about the sculpture, of which Figs. 26 and 107 purport to be exact drawings. The sarcophagus had formerly been divided into several pieces, which have, by the agency of M. A. Héron de Villefosse, been

Fig. 108.

Bas Relief in the Louvre showing Kithara and the Barbiton, an Instrument of the Rebab-lyre Type.

Photograph presented by M. Héron de Villefosse for this Work.

readjusted; the bas-reliefs represent scenes from the life of Achilles at Scyros, among the daughters of Lycomedes. With regard to the instruments seen in Figs. 26, 107 and 108, only the arm of the cithara held by Achilles' hand has been restored, but the drawings are not faithful representations by any means, as will be seen by comparing them with Fig. 108, this will give an idea of the difficulties thrown in the way of the musical antiquarian. The cithara turns out to be quite an ordinary specimen. The lute-like instrument of Figs. 26 and 107, as will be seen in Fig. 108, is nothing but the instrument already illustrated in Fig. 24 and therewith described.

Another representation of the same instrument is to be seen in Zoega's "Antiken Bas-relieven Rom's" (pl. 98), a representation from a sarcophagus dealing with the life of Phædra, where she is represented in a fainting condition, leaning on a boat-shaped instrument partaking of the characteristics of both lyre and Persian rebab, supported by a boy; her maids are ministering to her. The instrument is similar to that described and illustrated in Fig. 24, except that the strings seem to be attached to pegs at the base, arranged in two rows, three above and four below; a third example of the instrument exists in a cast taken of the Agrigente Sarcophagus, which is kept in the Sepulchral Basement at the British Museum. These instruments and those of the lute tribe are of Oriental origin, and they never came into general use either among the Greeks of Hellas or the Romans. The little we are able to find out about them serves to show the great activity then existing in the manufacture of musical instruments and the steps in their transition; we meet with some of these again in the early middle ages.

The position that music occupied among the Romans was very subordinate; it was but an amusement and an accomplishment even in its palmiest days, degenerating afterwards into an art practised by slaves and foreign musicians to while away

the leisure hours of luxurious Romans; it was manifestly impossible for art to flourish, or even hold its own under such conditions. It is evident, however, that music was extensively cultivated by the races under Roman sway, if not by the Romans themselves, for the musical contests continued to be held at the national games, the Pythian lasting until, at any rate, A.D. 394. These games were not only held at Delphi, but smaller contests, called Pythia, and modelled on the Great Pythian at Delphi, were also instituted in various provinces of the Empire, in Asia Minor more especially. There are several inscriptions found among the ruins of the Temple of Diana at Ephesus referring to musical subjects which are interesting; as, for instance, an epigram commemorating the victory of a son in a musical contest, the prize poem having been composed in vindication of his father, who had been slandered by malicious enemies. This inscription is in Doric, and was found on a pier of the Coressian Gate at Ephesus; the translation runs thus:—

"How good a thing it is to leave behind a son when one is dead, said the poet well versed in the sweet-tongued muses. This, my friend, is judged to be true in my case; for the memory which malice had destroyed, a son again revived. And to show by a good act his lasting gratitude for his parent, he kindled for me, not indeed a second light of life, but an immortal life of fame. All praise to the reverend race of the muses! for they have given me a living delight in my child for his virtue."

A second example is a fragment discovered on the site of the Temple of Diana, and was inscribed on a pillar erected in memory of her two sons, by Ulpia, who lived in the time of Augustus, as we find from another inscription on a sarcophagus. . . . . "of all the trials and given the prizes to the musicians and to the athletes at his own expense, and presided at the great festival of Artemisia, and conducted the games at the

great Pythia, and held the office of chief priest to the guild comprising Ionia and the Hellespont, and conducted the games for the Chrysophori, and likewise given columns to the city for the old Gymnasium. Erected by Ulpia, their mother" ("Wood's Discoveries at Ephesus"). Want of space prevents more than a fleeting allusion to this interesting subject. Until the forty-eighth Olympiad (584 B.C.) the Delphians had had the exclusive management of the Games, but this was afterwards entrusted to the famous Amphictyonic Council, composed originally of twelve of the wisest and most virtuous men in Greece, whose office was to attend to the temples and oracles of Delphi. The Games lasted several days, of which the first was devoted to music. At these contests, in which citharistas and auletes (oboists) only took part, a tremendous work in five parts, called "Nomos Pythicos," was frequently given; it was music descriptive of the struggle and victory of Apollo over the monster Python (Strabo ix. p. 421). To the Games came musicians from all parts of the world, and the Spaniards, at the beginning of our era, had attained to such a marvellous proficiency in playing the cithara, an instrument which they had learnt to know from the Phœnician colonists (1100 to 700 B.C.), that some of their citharœdes easily carried off the honours at the musical contests. The Consul Metellus was so charmed with the sweetness of the songs of the Spanish citharœdes, and with their skill in accompanying themselves on their citharas, that he sent some to Rome for the festivals, and the impression they created was so great, that the Romans henceforth could not do without them. On one occasion, at Rome, during the festivals, several instrumentalists were brought to perform at a banquet; after all invited had in turn played on the cithara, it was handed to a Spanish rhetorician, Antonius Julianus, and the Greeks who were present were all prepared to look down upon his performance with scorn, for was he not a barbarian? but he sang with such ease, sweetness and art, that all were

astonished (Aulus Gellius, "Attic Nights," vol. ii. lib. xix. cap. 9). This custom of handing round a musical instrument to each of the guests in turn after a banquet was afterwards much cultivated among the Anglo-Saxons. Music and dances played a great part in the Liberalia Feasts and the Dionysiac Rites (the latter borrowed from Greece); but the safeguard of a serious moral purpose being absent from the practice of music, which among the Romans was only cultivated in order to afford pleasure to the hearer, music became purely sensual, and sank gradually to such a low and immoral level, that at length the Bacchanalian performances were prohibited by special edict in 186 A.D. Whereas the Greeks showed the greatest reverence for the art of music, and had serious schools for its cultivation among the people, the Latins depended more upon *dilettanti* and *virtuosi* for their enjoyment of music.

Nero, it will not be forgotten, was not unpractised in the art of the citharœdes, and his vanity led him to masquerade in the guise of one before an audience of courtiers and sycophants, singing songs and sometimes accompanying himself, and at others commanding the musician, Diodorus, to do so on the cithara. In the year 64 A.D. Nero appeared as citharœdus in Naples, and later made a musical tour through Greece and the colonies, being everywhere received with fulsome flattery, which his vanity led him to believe sincere. He has been represented at his own command on coins and statuary in the character of musician that he so delighted in assuming (see Fig. 96).

CHAPTER VII.

The Cithara in Transition during the Middle Ages.

In the last chapter we left music at a low ebb in Greece and Rome at the beginning of our era. The high and noble aims of the tonal art were disregarded or forgotten; music became the slave of the senses. Whereas it had been the custom to teach youths and maidens to play the aulos (oboe) or the lyre, just as our children learn to play the piano, the practice was discontinued by degrees with the spread of Christianity westward, for fear that instruments, which had become associated with the low, sensual amusements of corrupt Rome, should exercise a pernicious influence on their young minds. The once glorious drama of Æschylus was tottering in a state of shameful degradation to its ruin, which came at length towards the end of the fourth century A.D., when the condemnation of the Church closed the theatres, and the great national games, the Pythian, came to an end. It will be seen that Christianity was by no means favourable to the development of instrumental music; on the contrary, the bitter but unavoidable antagonism of the Church to all connected with the theatre condemned good and bad without discrimination, and even went so far as to refuse the sacraments to professors, musicians, actors and mountebanks, and to threaten with the terrors of excommunication all who visited theatres on Sundays and holidays: thus was instrumental music banished from both civil life and religious rites, which latter were long conducted with simple, un-

accompanied chants. We must seek among the unconverted barbarians of Northern and Western Europe for the slender threads which connect the musical instruments of Greeks and Romans with those of the early middle ages. When the theatres were closed, a number of actors, jugglers and musicians lost their occupation and means of sustenance; they took to a wandering life, appearing at festivals with their instruments to play and sing for the delectation of the rich, and then disappearing again.

There is evidence that the Eastern, and more especially Asiatic, influence in the development of stringed instruments was of overwhelming force, for it has repeatedly been brought to bear on Western Europe from different points.

Asia introduced the cithara to the Greeks of Hellas, and through them to the Romans, who in turn spread their knowledge among their tributaries. Those great travellers and colonists, the Phœnicians, implanted their knowledge in Southern Spain many centuries before our era, so that the excellence of the Spaniards in citharœdia was not derived from the Romans.

After the decadence of the Roman Empire, when musical instruments seemed about to disappear for ever from Christian Europe, the barbarian races kept alive the traditions taught them by conquerors and colonists; but as civilisation was in its infancy with them, the instruments sent out from their workshops were probably of crude, primitive types, like that shown in Fig. 109—the cithara of some Gallic bard before the days of Cæsar, if we take Herbé's word for it, for his authority is not clear. We know from Diodorus (Hist. lib. v. 31) that the poets of the Gauls, called bards, sang the songs they composed to the accompaniment of an instrument similar to the lyre. By the eighth century the soil was ripe for fresh outside influence, and it came in the

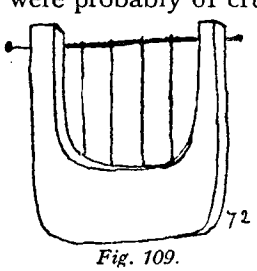


Fig. 109.
Ancient Gallic Cithara (before Cæsar). Herbé's "Costumes Français."

shape of the conquest of Spain by the Moors. Charlemagne, the most cultivated and enlightened sovereign of his and of many preceding ages, was the means of disseminating the fresh knowledge of musical instruments brought from the East, which fell on good soil, and was skilfully adapted and readily absorbed. When the Crusades drew the flower of chivalry to the East, the art of music had made great progress in Europe, the germs of harmony were seething and stirring, but there was still much to be learnt on the score of musical instruments from the Orientals, and the returning Crusaders doubtless gave a fresh impulse, even if they did not actually introduce innovations.

As sculpture and painting were of the crudest among the barbarian races, and that with the Christians musical instruments had almost fallen into disuse in the fifth and sixth centuries, we have nothing to guide us in this transition period but a few allusions in the writings of the fathers, some coins, and finally the miniatures in MSS. of the eighth and ninth centuries which enable us to retrace in a measure the various steps in the evolution.

If we attempt to prosecute this study, trusting in the names applied to the instruments at different periods and by different nations, we shall find ourselves entrapped by many pitfalls, and the result will be chaos. For, from the earliest times, instruments have been arbitrarily named from their shape, size, material or character, according to the whim of the maker. Thus as each country had its national instruments, the same instrument was known under many different names; and the same name was frequently applied to very different species. It would therefore seem best to classify the instruments for oneself, according to certain broadly defined characteristics, following the latter as tenaciously as may be throughout the centuries, paying little attention to detail (for the purpose of classification), since artists of all ages have sinned grievously

against truth in their representations. If we find important features repeated by various artists, we may feel tolerably certain that these features really existed. Among Greeks and Romans we found the name *cithara* applied always to instruments possessing the specification of a sound-chest composed of a sound-board and back generally parallel, joined by sides or ribs, though differing in outline, size and details. Our authority for this statement lies in the fact that the citharœdes represented in sculpture and painting, and who are easily recognizable by their dress, invariably used this kind of instrument, frequently miscalled lyre by modern writers. In the middle ages the word cithara was applied to various stringed instruments, and the word itself assumed other forms, such as cither, guitar, cittern, gittern, cetra, zither, &c.; but the steps in its development into a violin are well defined.

The most highly developed cithara that we found among the Roman remains (Chap. VI., Fig. 104) shows that the advantage of constructing the sound-chest so that the whole length of the strings should lie over a resonant body, instead of part only, thus ensuring their not being played *à vide*, had been recognized. This is the first step in the transition, and in Fig. 110, another similar instrument, from a statue in Rome, is seen; here the central hole, not a sound-hole, but an opening made right through the instrument, allows the strings to be twanged by both hands from back and front. It was presumably not until the practice of stopping the strings with the left hand and of twanging them with the right only became generally known in instruments of the tamboura type with long necks, that the principle was applied to the cithara; these openings then gradually disappeared from the precursors of the violin, lingering only after many meanderings until the eighteenth century in the Welsh crwth.

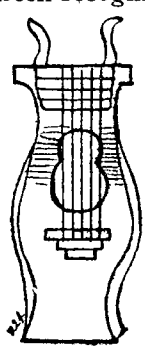


Fig 110.
Roman cithara in transition (1st step), from a Muse in Rome. Montfaucon, Supp. Tom I. 34.

There are two distinct and independent tracks to be followed in the evolution of the cithara during the middle ages: the one, always the more primitive, seems due entirely to European enterprise; the other is of Eastern origin, and led, after many centuries, to the violin.

We therefore find the cithara undergoing two simultaneous transitions, both of which are important in the early stages. The instruments of European development retaining at first the general outline and characteristics of the cithara remained fundamentally true to their prototype; whereas those in which the influence of the remote Eastern civilization is discernible, by grafting the neck of the instruments of the tamboura and nefer tribes upon the sound-chest of the Greek cithara, arrived at the form of the guitar fiddle before the bow was applied to the instrument, *and absolutely without the intervention of the Moorish rebab*, which is entirely devoid of any of the characteristics of the violin tribe. It is evident that this evolution had been previously accomplished by the ancient Egyptians centuries before, as will be seen when these theories are further developed.

Therefore, to follow out the European track first, we leave Rome and Roman instruments behind, and search in countries that were under Roman domination, and in which the Roman civilization and arts were firmly implanted, for further links in the chain of evidence, either in writings or in delineation. These links are at present meagre enough, but it is to be hoped that in time further discoveries will be made, when more is known to musical antiquarians of the treasures lying fallow in provincial towns in England and on the Continent.

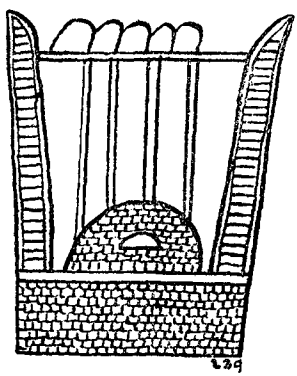


Fig. 111.
Cithara mosaic. See Lyson's "Reliquæ Britannico-Romanæ."

The Romans were not great musicians or *virtuosi* themselves, although they knew how to appreciate music, and citharistas must have followed the army that conquered Britain and have taught the Britons to use and make the instrument, for among the relics of Roman Britain we find a cithara with four strings roughly designed on the mosaic pavement excavated at Woodchester. The instrument depicted in Fig. 111 is by no means in an advanced stage of development; this may be partly the fault of the artist: it is not clear whether the front or back of the instrument is represented, probably the front, and the artist may have omitted to carry the strings down over the bridge into the tailpiece. It is not a question of great importance, but Fig. 111 shows that the Britons knew the instrument at an early period in their history. Another still rougher example is found engraved on a silver military ensign found near Stony Stratford (see Lyson's work quoted).

In an illuminated MS. in the British Museum, dating from the beginning of the eighth century (Cotton, Vesp. A. 1), we find a cithara in transition form in the hands of King David; he is twanging the strings with the left hand, and appears to be using his right to stop the vibrations. The MS. is a Psalter finished in 700 A.D., and therefore represents instruments known in the seventh century. On examining the Psalms in the MS., we find the musical instrument now translated harp called *cithara* or *cythara* in the Latin text, and *citram* or *citran* in the accompanying Anglo-Saxon interlined version. Many musical historians have called the instrument a "rotta," and they may be right, but there is no evidence of its being so-called by the Anglo-Saxons of the period, who evidently recognized in it the successor of the Greek and Roman cithara: it is better, as names of musical instruments in the middle ages are apt to be misleading, to depend rather upon general characteristics for the purposes of classification. King David's instrument in Fig. 112 has an oblong sound-chest not unlike those of the

latest Roman citharas we saw in Figs. 104 and 110; but the opening left here for the purpose of twanging the strings is larger. The artist has not shown the method in which the strings were fastened at either end, nor has he indicated any bridge; there are six strings, the same number as in the Welsh crwth.

Fig. 112.
Cithara in transition. Cotton MS., Vesp. A. 1. Brit. Mus. 700 A.D. (or Rotta, see Fig. 168, Old German Rotta.)

In Fig. 113 we see the back view of a similar instrument with but five strings only, which the performer (again King David) is twanging with his left hand. This illustration, which I have reproduced without the ornamental details, is taken from an illuminated MS. of the eighth century, in the Cathedral Library

at Durham, entitled, "A Commentary on the Psalms by Cassiodorus *manu Bedæ*," a transcription by the Venerable Bede of "Exposito in Psalmos sive commenta Psalteriis," by Cassiodorus.

We find a similar instrument in Germany, depicted in a MS.

Fig. 113.

Cithara in transition (or Rotta). MS. Durham Cathedral Library. 8th cent. See J. O. Westwood's "Facsimilies."

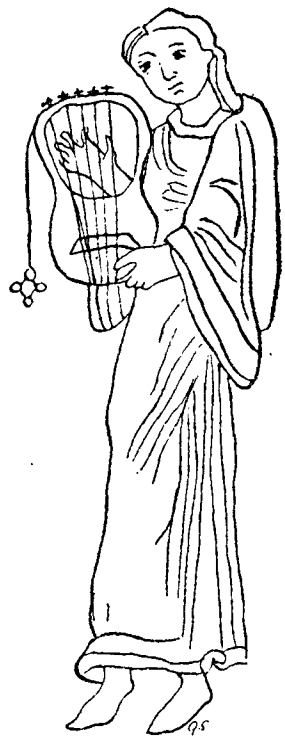


Fig. 114.

"Cythara Teutonica." Martin Gerbert's "De Cantu et Musica Sacra."

of the ninth century, one of the many rescued from oblivion by Martin Gerbert from the monastery of St. Emmeran at Ratisbon, which were placed at his disposal by the monks to aid him in his researches into the history of music. Abbot Gerbert had a printing press at the magnificent monastery of St. Blasius in

the Black Forest, where his work, "De Cantu et Musica Sacra" was published. The instrument drawn in the MS. is called a *cythara teutonica*, and in this case the name affords additional evidence of the origin of the instrument. This specimen has five strings fastened to little hooks, and raised from the sound-board by means of a wide bridge, which already shows signs of two feet. A little plectrum hangs by a ribbon from the instrument, while the performer twangs the strings *à vide* with her right hand. The opening for the hand is large and roomy. The outline of the instrument (Fig. 114) is already that of the body of the guitar-fiddle without the neck.

This is the second evidence we have that these instruments went by the name of cithara in Germany and England during the eighth and ninth centuries. An old Germanic rotta or cythara found in an Alemanic tomb of the 4th to the 7th century in the Black Forest very similar to Fig. 113 is given on p. 440, Fig. 168, together with a full description.

In connection with the application of the name *rotta* to this instrument, there is an interesting passage in a letter of the eighth century written by Cuthbert, Archbishop of Canterbury, to Lullus, second Archbishop of Mainz and successor to St. Boniface the Martyr, among whose correspondence it was preserved and found. The reader will find the letter numbered XXII. in Migne's Patrologiae Cursus Completus Tome 96, p. 839; freely translated the passage runs thus:* "It delights me to have a citharista who can play the cithara which we call rotta, for I have an instrument, but have no musician to play it"—the word which I have translated "play" means to twang with the fingers, which shows that there was as yet no bow used for this early rotta. How long the word rotta had been in use and what its derivation is we do not know exactly, but it seems unlikely that it had any connection with *rota*, the

* For the original Latin see p. 425.

Latin for a wheel; it is more probable that it is a form of the word *chrotta:* this opinion is strengthened by the fact that in the poem already quoted by Venantius Fortunatus (sixth century) the instrument is in one MS. called "Chrotta Britannica," and in another in the Vatican, "Rotta Britannica," the specimens illustrated in Figs. 112, 113 and 114 were undoubtedly early forms of the crowd, crwth or rotta.

There is an interesting though short descriptive reference to the rotta (the earliest found as yet) given by Gerbert in his "Scriptores Ecclesiastici de Musica" (vol. i., p. 96). The quotation in German dates from the second half of the tenth century, and was penned by Labeo Notker—the younger Notker—a monk of St. Gallen, which was one of the three music schools founded by Charlemagne. "Fone diu sint andero lirun, unde andero rotun is siben sieten, unde siebene gelischo geuuerbet," which has been translated by Professor Max Müller, at the request of the late Mr. A. J. Hipkins, as follows: "Of them there are in the lyres and in the rotes (or rottas) each seven strings, and these seven are made to vibrate in the same way." (See "The Early History of the Violin Family," by Carl Engel, p. 52). With regard to the number of strings, it was as variable in this instrument as in lyres and citharas. This passage shows us that the lyre and rotta were both twanged with the fingers or with a plectrum, which corroborates the statement of Cuthbert before quoted.

Thus far the rottas (or cytharas) had not passed through more than one stage in the transition, and the makers had, presumably, gathered inspiration from no other instrument, unless it be the psalterium, from which Notker Balbulus, who lived in the ninth century, declares it to be derived. (See "Symbolum Athanasii apud Schilterum," word *rotta*).

The chrotta (or rotta) was called the instrument of the Britons by Venantius Fortunatus in the sixth century; it certainly became, in conjunction with the harp, the national Welsh

instrument, and may have been less primitive in that country than with the Anglo-Saxons: perhaps it resembled a very much more advanced specimen (see Fig. 115) that we find depicted in a MS. dating from the middle of the ninth century, the Bible of Charles le Chauve, now in the National Library, Paris. The colouring is black and yellow. This instrument is also reproduced in "Peintures, Ornements, etc., de la Bible de Charles le Chauve" par le Comte Auguste de Bastard, Paris, 1883. In this case a fac-simile of the whole miniature representing King David and his musicians is given and the chrotta is being played by Aethan, who is stopping the strings on the finger-board with his left hand and plucking them with his right. King David in this miniature is playing a small triangular harp.

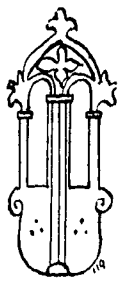


Fig. 115. Crwth, ninth cent. MS. Bibl. Nat. (See Willemin, "Monuments Inédits.")

In another Bible transcribed and illustrated for Charles the Bald which was formerly in the Monastery of St. Paul *extra-muros*, Rome, and is now deposited in that of St. Callixtus also in Rome, there is another chrotta of precisely the same style as Fig. 115. The instrument occurs in a miniature representing King David composing the Psalms; it is being played by one of the musicians just as in Fig. 115. In both examples the second stage in the transition has been accomplished; the strings are no longer played *à vide*, for there is a fingerboard, and a space has been left on each side of it for the hands to pass through. The instrument still retains the general form of the cithara, and I should be inclined to think that at the time when that chrotta was made the finger-board was no longer a novelty. A third example of the instrument similar but not identical in form is represented on the ivory binding of the Lothair Psalter to which reference is made further on. See Pl. I. Let any one who feels the slightest doubt as to the origin of

the instrument compare Figs. 115 and 105, and it will be at once evident to him how the crwth was called into existence. This is the model which eventually developed into the eighteenth-century crwths we know from Daines Barrington, and Edward Jones' "Relicks of the Welsh Bards." (See Fig. 33).

Fig. 116 *

King David and two musicians playing on rottas. See "Geschichte der Bogen Instrumente" (Taf. VI., No. 5), by Julius Rühlmann.

In Engel's book quoted above (page 42), there is an engraving of a crwth which may be assigned to the fourteenth century, or the beginning of the fifteenth at the latest; the original is a fresco in the Chapter House, Westminster, the walls of which

* Reproduced by permission of Prof. Dr. Richard Rühlmann.

were decorated in the reign of Edward III., between 1336 and 1360, but it is recorded that additions were made towards the end of the century. This crwth has a finger-board, and is so like the crwth in Jones' "Relicks" (see Fig. 33), although this one has but three strings instead of six, that we may presume we have here the *crwth trithant* (with three strings).

The crwths of the eleventh, twelfth and thirteenth centuries, in which the oval form of the fiddle or vielle was borrowed, never seriously influenced the development of the crwth. (See Figs. 37 and 38).

There is not the slightest authority for thinking that the bow was used with instruments of this class before it was applied to the rebab and to the precursors of the violin. An interesting fact, first discovered, I believe, by the late Julius Rühlmann, who was an indefatigable antiquarian as well as a fine practical musician, is brought to our notice in his "Geschichte der Bogen Instrumente," published after his death by his son (Taf. VI., No. 5). In his researches Rühlmann came across this quaint illustration of King David surrounded by four musicians, in a prayer-book of the eleventh century that belonged to the Archbishop Leopold the Saint (1073 to 1136): the MS. is treasured up in the monastery of Neuberg,* near Vienna, which was founded in 1114 by the Archduke. The three most prominent figures (see Fig. 116) are represented with rottas in their hands, and we see here three distinct sizes that would correspond to the treble, tenor and bass voices. It is evident from this that before the end of the eleventh century, when, at the latest, the prayer-book was transcribed, these

* In a letter received from the librarian at Kloster Neuburg concerning the MS. Prayer Book from which Fig. 116 was taken, I am informed that in Psalm xliii. 4, lxxx. 2, and cl. 3, the stringed instruments are rendered "cythara" and "psalterium"; the latter instrument is also shown in the drawing, but was omitted from my illustration, as it lies outside the subject, Fig. 116 evidently represents the artist's idea of a cythara.—K. S.

instruments were made in sets, as was the case later with viols and wood-wind instruments. The smallest, corresponding in size to the violin, is held against the breast obliquely, with the opening for the hand uppermost; the second, a little larger, is being held at rest; the third, which would represent the 'cello, is held in much the same position as the latter, and is more than twice the length of the smallest instrument. All three have bows, and the two musicians at the right and left of King David appear to be awaiting a signal from him to begin to play. The drawing, though crude and unsatisfactory, since no strings are indicated in the two larger of the instruments, and the two given to the smallest rotta are placed where the bow could not by any possibility reach them, is very interesting and of great importance. The artist has given the instruments very large sound-holes, and in one a bridge is indicated; the opening for the hand—the chief characteristic of the rottas—is heart-shaped, and the instrument has a waist which, in my opinion, was not made to facilitate the bowing, but was simply reminiscent of the cithara or lyre in its most elegant forms.

A MS. in the University Library, Cambridge (F. f. 1. 23) a Latin Psalter of the 11th cent. with interlinear Anglo-Saxon translation in red letter of the same size and hand, shows in a scene of King David and his musicians, the former playing on a small harp, Ethan, on a very small instrument in outline like a rotta but without the opening, it has no neck, but is being held like the modern violin and played with a bow; another musician is playing on an elongated rotta, and plucking the strings with his fingers. (See J. O. Westwood, Pal: Sac. Pict., 1845, pl. 41).

In corroboration of the fact noticed by Dr. Rühlmann (see "Geschichte der Bogen Instrumente," Taf. VI., No. 5, and p. 92), and shown in his illustration, that rottas were made in various sizes, and also in sets corresponding to the various

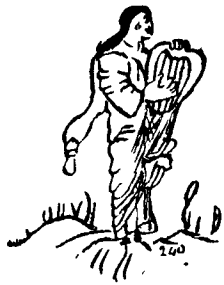
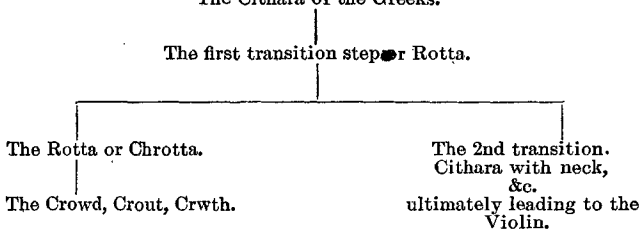


Fig. 117.
Bass rotta or cithara.
Utrecht Psalter. Ps. 149.

registers of the human voice, a tiny figure has been reproduced in Fig. 117 from an old MS. (ninth century) known as the Utrecht Psalter, which will be noticed at greater length further on. The instrument held by the singer is of almost identical proportionate size with that held by the musician at the right of the group in Fig. 116, which corresponded probably to the 'cello in our string quartet; here the instrument, which has four strings, is being twanged with the right hand instead of vibrated with the bow, showing that the idea of making the instrument in sets was anterior to the application of the bow to the rotta; indeed, when one remembers that the rotta is but a fully developed cithara or lyre (for both instruments seem to have served as models), which among the Greeks certainly did exist in various sizes, this will not seem surprising. The exact date of the Utrecht Psalter is not known; but most experts agree in placing it in the 9th, two centuries earlier than the MS. from which Fig. 116 was taken. Fig. 117 is part of the illustration to Ps. 149 (150 in our version), and in the text the instruments are rendered " . . . . Cithara et choro, in cordis et organo in cymbalis tubæ"; there are several other citharas besides this one in the illustration, and they resemble some which are given further on.

Numerous illustrations of the later stages in the evolution of crwths might be given, but they lie outside this chapter, for the transition of the cithara along this track never extended further than bridge, sound-holes, finger-board and bow, and all these have already been exemplified.

Starting again from the cithara at the point where the bifurcation indicated in the accompanying diagram occurs, we have



to travel along the second track, which bears traces of Oriental influence, and now it behoves us to walk carefully, for we tread on debatable ground, and the illustrations which will be brought forward to prove my theory of the origin of the violin (see Chap. II., "The Question of the Origin of the Violin,") have not yet to my knowledge appeared in any work on music; they seem to have completely escaped the notice of musical historians.

Hitherto we have known the cithara in various forms in antiquity, and in the early middle ages under the name of rotta; in the twelfth century (perhaps earlier) we find in Europe the guitar-fiddle with ribs and incurvations, and between the two a gulf, which has only been bridged by surmises. It is the Moorish invasion of Spain in the eighth century which causes the greatest difference of opinion. The Europeans most probably learnt the use of the bow from the Arabs, who introduced it, together with many of their musical instruments. Some of the most earnest antiquarian musicians, and notably Mr. Carl Engel, have named the Moorish rebab as the precursor and origin of the violin. As the rebab was a boat-shaped instrument without ribs, neck or fingerboard, scooped out of a solid block of wood to which was glued a flat sound-board, I feel compelled to reject it entirely from the genealogical tree of the violin, nor can I see that the crwth has any right to a place therein either, for instead of becoming merged in the instrument of which it was the supposed prototype, the crowd or crwth kept to its characteristic development in the

one direction long after the guitar-fiddle was known in Western Europe, finally falling into disuse without further development. Contemporaneous with both these types, there existed an instrument which supplies the missing link in the chain of evolution which produced the guitar-fiddle and later the violin; this instrument was formed from a cithara to which were added a long neck and finger-board, in some cases with frets, and three or four strings; further, although twanged with the fingers, it was held in a very similar manner to the modern violin. These illustrations show two or three distinct forms of this transition besides ordinary citharas and the instrument in Fig. 117, a rotta; the reader will judge which of these forms has the best claim to be classed among the precursors, in direct line, of the violin.

A conclusive proof that the illustrations represent modified citharas, and that they were known as such in the ninth century, if not before, lies in the fact that not only do these instruments appear as illustrations of the Psalm in which the word "cythara" occurs, but also that in Psalm 42 (43 in our version), where that instrument alone is mentioned, it is also the only one in the drawing. (See Fig. 121).

THE UTRECHT PSALTER.

The illustrations to which I refer are reproduced from an illuminated MS. known as the Utrecht Psalter, about which there have been endless discussions and reports in the somewhat vain endeavour conclusively to prove its date and origin. The MS. is at present in the library at Utrecht, but it bears the signature of Robert Cotton on the fly-leaf, and it has been identified as the missing Cotton MS., Claudius c. 7, which was once in our possession.

There are many facts about this MS. which are worthy of special interest; for instance, it contains a copy of the Athanasian creed, which is of great importance to the theologian.

With regard to the age of the MS. competent experts have

placed its date somewhere in the 6th cent., others in the 8th while the majority are now agreed that the Psalter dates from the first half of the 9th century.

As to the nationality of the handiwork and more especially of the drawings, which are outlined with a pen in bistre, some say they are the work of an Anglo-Saxon artist, some that they are copies from an old classical MS., whereas Sir Thomas Duffus-Hardy considers they bear unmistakable signs of Oriental work, and that the scenery, fauna, flora, implements, furniture and costumes are such as would be familiar to an artist living in Alexandria before the burning of the library in 638 A.D., the scattering of the theological schools, and the destruction of the city by the Arabs. Without being competent to judge whether this is correct from any other standpoint, I consider that the musical instruments bear distinct traces of Oriental influence such as the Greeks of Asia Minor, Syria and Northern Egypt would be likely to have felt in their intercourse with the Persians, Arabs, etc., who used the instruments of the older Asiatic civilizations, from which the neck finger-board and pegs were borrowed, whilst the sound-chest of the instrument remained essentially Greek in contour, and the instrument itself retained its Greek name of kithara, in Latinised form *cithara*.

The Utrecht Psalter is in Latin, and it is the Gallican version of St. Jerome (380 A.D.) which has been used; the characters are rustic Roman capitals, a style of writing which prevailed in Europe from about the third century to the seventh A.D. The titles are in Uncials.

It is a thousand pities that the figures in the drawings are so small, and some, alas! so indistinct, since the musical instruments are of so great an interest; larger figures would have given the artist more scope for the detail of which he seemed by no means oblivious.

The Utrecht Psalter was evidently much admired, for MS.

Plate III.

Ps. CXLVI., Showing the Cithara in Transition with Frets. Utrecht Psalter. IXth Century.
(Reproduced from the Autotype Fac-simile in the British Museum).

Photograph by E. J. Clark.

copies which are extant were made of it at intervals extending over a period of several centuries. There is available in the Reading Room at the British Museum a fac-simile of the whole Psalter in autotype, published by Messrs. Spencer, Sawyer, Bird and Co., which any interested reader can examine.*

We will now consider the principal stringed instruments found in the MS., which have been reproduced in the same size. In Fig. 118 we have the back view of an ordinary cithara with four strings, the corners of the sound-chest have been rounded off; it occurs in the illustration of Ps. cxlvii of our version. The same instrument is seen again in Fig. 119; this, it will be seen, differs essentially from the large rotta in 117; in the latter the sound-chest has an opening made for the fingers to twang the strings from both sides, whereas in Figs. 118 and 119 there is merely a bar across from arm to arm, to which the strings are fastened, this constitutes the main difference during the early middle ages between the cithara proper and the cithara in transition or rotta.

Fig. 118.
Cithara Utrecht Psalter (Cott: Claud c. 7. Ps. cxli.)

Fig. 119.
Ibid. Ps. 134.

Fig. 120 shows the back of an instrument composed of the lower part of a cithara, to which has been *added* a long neck; from the back view it appears to be really added and to form a finger-board. The reader will be able to observe this characteristic construction in some of the remaining illustrations.

The instrument in Fig. 121 is the one which remains as a proof that these instruments were acknowledged descendants of the cithara at the time when the artist drew these illustra-

* As the press-mark is not easy to find, I may mention that the book is indexed in the catalogue under the heading of *Bible*, Psalter Latin, press mark C 35. K. 8.

tions; Fig. 121 occurs in the illustration to Ps. xlii. (xliii. in our version), and is the only instrument on that page. In the text of the Utrecht Psalter it is called cithara, and in our version the verse (4) runs, "Yea, upon the harp will I praise thee, O God, my God"; the word *harp* in our version, which always stands for *cithara*, is, of course, a mistranslation, and the manner in which the error arose will come under consideration in a subsequent chapter. The body or sound-chest in Fig. 121 corresponds in shape to the citharas in Figs. 118 and 119, minus the arms, that is to say, as though they had been cut off, and the disproportionately long neck added. This was clearly the first direct step taken towards the violin, which strains right away from the cithara proper, destroying at a blow one of its characteristics, that of twanging the strings *à vide*, and of depending therefore on the sound-chest alone for resonance; in the first step of the transition, what already existed was further developed, that was all, the general outline remaining the same, which is by no means the case with this second step. Any casual reader might at once perceive the relationship of the rottas in Figs. 112, 113 and 117 to their prototype, but the origin in the case of Fig. 121 is by no means so apparent.

Fig. 120.
Ibid. Ps. xli. Cithara in second stage of transition.

Fig. 121.
Cithara in second transition. Utrecht Psalter. Ps. xlii.

There are clearly three strings to our new example, as any one can see from the head of the instrument, which has three pegs, or perhaps only hooks, as in some citharas. The drawing is too small to show which—if they were pegs they were probably in the back of the head. A tail-piece, reminiscent of the stands of some lyres, has been drawn by the artist in this instrument, although it was absent in Fig. 120. The musician is

holding out the instrument as though drawing special attention to it as to something new and wonderful. It is highly probable that the musicians of those days having added a neck to the instrument in imitation of the tambouras they had seen, instead of adopting the tamboura straight away, because they retained a lingering fondness for the old Greek cithara, yet did not at first fully understand the possibilities of the neck when they had got it. The idea of stopping the strings to produce a succession of intervals on each string came very gradually. It is a pity that the manner in which the instrument was played was not shown in any of the illustrations.

Fig. 122 shows another specimen of the same kind which illustrates verse 2 of the 107th Psalm: "Awake, psaltery and harp," which in the Gallican version is rendered, "Exsurge psalterium et cythara." David is here represented heavily laden with two musical instruments and a long sword—in the former we recognize the cithara, and the other is meant to represent a small triangular harp which the Greeks occasionally used and called Trigonon, and of which several different kinds are found on Assyrian monuments. There is a bridge to the cithara and we also note a somewhat indistinct tail-piece, but very different from that in Fig. 121; there are three strings, and the three pegs in the head are clearly shown. This head occurs the same exactly in another instrument of the same century, about which I shall have occasion to speak shortly, and which is of Oriental origin.

Fig. 122.

Cithara, second transition, and Psalterium. Utrecht Psalter, Ps. cvii.

Leaving this model, we now find one in which a third step in the development, and a very weighty one, has been reached. On examining Fig. 123 in the illustration to Ps. cxxxiiii. we

Fig. 123.
Back view of cithara, third transition. Utrecht Psalter, Ps. cxxxiiii. (cf. Fig. 196).

find that the cithara maker, still feeling his way, and probably dissatisfied with the results given by the instruments in Figs. 120, 121 and 122, which were cumbersome and difficult to hold, imagined a sound-chest which should entirely cover the general outline of the old cithara, as seen in Figs. 118 and 119, and to this he added a neck of a suitable length that could be conveniently reached by the player. The little figure striding along so joyfully is holding his instrument close against him, so that the back view is presented to us, and we see nothing of strings or bridge; but what could be more significant than the shape of the body, or indeed of the whole instrument? It does not require a very great stretch of imagination to add the round shoulders of the guitar-fiddle, of which Fig. 124 is an example. It is taken from a MS. of the thirteenth century, Add. 28784A, a book of Hours of the Virgin written late in the fifteenth century, with miniatures by French artists, and cuttings of initials and borders from a beautiful Psalter of the thirteenth century, which are pasted in the book of Hours; it is one of these cuttings which I have here reproduced, so that the readers may compare the two specimens, one from the ninth century, and the second from the thirteenth. The artist has represented the performer holding the fiddle on the right arm; the similarity is startling, and it would be a great delight to find further traces of this early development during the intervening centuries. Unfortunately, the opportunities of becoming acquainted with the illuminated Psalters and other MSS. of the eighth and tenth centuries, or earlier, that remain in Europe, are few and far between, and must be a matter of time.

Fig. 124.
Guitar fiddle, 13th century. From a MS. in the British Museum Add. MS. 28784A.

The next figure (125) shows us the instrument being actually

played upon, and again we cannot but be struck by the manner in which it is held, for it reminds us very forcibly of the position of vielles and fiddles, and later of the violin itself. The reader will no doubt remember the position in which the nefers or tambouras were held by the Egyptians; they were shown in Figs. 31, 32 and 102. The body of the instrument was held against the chest of the performer towards the right, either in a slanting position with neck pointing upwards towards the left shoulder, or else the tamboura was quite horizontal (see Fig. 32); in no case have I come across a nefer held like this instrument in Fig. 125. It is evident that the position in which the nefers and tambouras were held was traditional with the Egyptians and later with the Arabs, for in a beautiful MS. before quoted of the thirteenth century, containing the Cantigas de Santa Maria, in which fifty-one figures of musicians are painted in delightful little miniatures, we still find the Moorish tamboura differing but little from the ancient Egyptian model, and held in precisely the same manner (Fig. 28), whereas the horizontal position was common during the middle ages for twanged instruments such as citterns, or ghitterns (almost invariably terminating in some grotesque animal head), and lutes, and does not require illustration.

Fig. 125.
Cithara, third transition. Utrecht Psalter, Ps. lxxx. (cf. Fig. 136 and 137).

Thus, throughout our examination of these little drawings in the Utrecht Psalter, we are confronted with evidences of strong originality and independence, which are more Greek than Moorish, since the instruments of the latter remained practically unchanged for centuries. There is a great amount of enterprise and perseverance displayed in the construction of these instruments, consisting of parts borrowed from those of other nations; not, however, blindly accepted in a conservative spirit, but adapted with understanding, altered and improved to form a new instrument.

Fig. 125 occurs in the illustration to Psalm lxxx. of the Utrecht Psalter with reference to verse 2: "Take a psalm and bring hither the timbrel; the pleasant harp with the psaltery," which in the Gallican version is rendered, "Sumite psalmum et date tympanum, psalterium iocundum cum cythara." *Psalterium et cythara* are the very same two instruments represented in Fig. 122, and, as we know which kind of instrument went by the name of cythara, we also know which was at that time called psalterium, viz., no other than the small triangular harp called Trigonon, which I have not again reproduced, as it is precisely the same in the illustration to Psalm lxxx. as in Fig. 122. Fig. 125 was, therefore, another form of the recognised cithara.

In an Anglo-Saxon MS. dated 700 A.D., a Latin Psalter, in which the Gallican version of St. Jerome has also been followed and which is interlined in Anglo-Saxon, the same psalm has over the word psalterium, *hearpan*, and over cithara, *citran*. I shall have more to say on this subject when dealing with a later century, but it is interesting to know what words were used for the instruments by our Anglo-Saxon forefathers; of course, *hearpan* is our word harp, and to the word *citran* it is not difficult to trace the cittern of the later middle ages.

For the last of the series of citharas from the Utrecht Psalter I have kept the most highly developed (Fig. 126), a cithara resembling the last two models, and seen from the front. The neck of the instrument is considerably longer and has frets indicated, which the artist has probably put in from memory, the distances between them being slightly erratic and not calculated to produce any recognized intervals. Still, there is no doubt that he must have seen instruments of the kind with frets; on the other hand, he has omitted bridge and tailpiece, although the three strings are shown over the sound-board. There are three pegs set in the head, and the strings pass through little holes to

Fig. 126. Cithara, third transition. Utrecht Psalter, Ps. cxlvi.

the back before they are wound round the pegs. There is no appearance of a bow, and judging from the position in which the performer is holding his cithara, he had no intention of playing upon it just then, but appears to be idly twanging the strings with one finger as he stands.

This little figure is taken from the illustration to Psalm cxlvi. (cxlvii in our version), verse 7, "Sing praises upon the *harp* to our God"—harp is of course rendered in the Latin "cithara"; there is but one instrument mentioned in the text, but there are several in the illustration: another like Fig. 126, and several primitive citharas like those in Figs. 118 and 119.

It is not right to take too much for granted or to build too much upon the slender evidence afforded by the miniatures in ancient MSS., but from the absence of the bow with all these instruments, it seems reasonable to suppose that it was not known, or at any rate not used with stringed instruments of this description in the artists' country; but then where did the bow come from, and when did it first make its appearance in Europe? It is impossible to form any definite conclusion on the subject with such poor facts and evidences as we have brought to light up to the present time; these, however, will be touched upon in the next chapter, and the reader must be left to form his own opinion of the matter. It is just this question of the nationality of the artist which we should like to be able to solve definitely. I have at the present time the strongest reasons to believe that the originals of these exceedingly valuable little drawings of instruments were *not* the work of an Anglo-Saxon or Carlovingian artist; these reasons are entirely founded on studies of musical instruments and on the manner in which the instruments were copied in the case of the Harleian MS. 603, and would have little or no weight from an archæological point of view.

CHAPTER VIII.

The Question of the Origin of the Utrecht Psalter.

The question of the origin of the Utrecht Psalter continues to interest the palæographical and archæological world and since the researches embodied in a series of studies* forming the basis of Part II. of this little work were published in 1897, the bibliography of this singular and baffling MS. has received many important and authoritative additions. In view of the weight of evidence in favour of my theory of the origin of the violin furnished by the drawings of musical instruments contained in the Utrecht Psalter, I have considered it advisable to re-open the subject in order to take advantage of any fresh light thrown upon it by recent writers, and to avail myself of the increased opportunities for studying the illuminated MSS. of other countries afforded by the many beautiful publications of fac-similes which have recently appeared.† The following is a brief review in chronological order of the principal works concerning the drawings of the Utrecht Psalter, which have been consulted in treating the subject.

* The Series appeared in the "London Musical Courier" between June 1897 and the end of 1898.

† See "Bibliography."

(1). Fac-similes of the Miniatures and Ornaments of Anglo-Saxon and Irish MSS., 1868, by Professor J. O. Westwood (pp. 14-20). Professor Westwood, who inspected the Utrecht Psalter at Utrecht,* considers that the writing of the text might be referred to the VI. or VII. cent. with the exception of the large golden uncial B, the initial letter of the first Psalm, which is in genuine interlaced Saxon style.†

Concerning the drawings, Prof. Westwood has come to no such definite conclusion; he considers it probable that these were copied from some earlier MS. derived from Rome, by Anglo-Saxon artists, not necessarily contemporaneously with the text, but at a later date, perhaps the IX. c. On the fac-simile reproductions which he gives of Psalms 1 and 149, the date is thus expressed. VI. cent.? IX. cent.?‡

In a later dissertation forming part of the report given below (No. 3), Prof. Westwood states the various points which induce him to refer the MS. to the 8th or 9th c. at the earliest; he still adheres to the Anglo-Saxon character of the drawings. In a letter to the Athenæum (July 18, 1874, p. 81) he draws attention to the remarkable ivory carvings on the binding of the Psalter of Charles le Chauve,§ (middle of 9th cent.) in the Bibliothèque Nationale, Paris. The scene carved on one of the ivory plaques is almost identical with that given as illustration to Ps. 56 in the Utrecht Psalter and in the Harleian Psalter,

* See "Archæological Journal," Vol XVI., pp. 132-145 and 236-252.

† See Westwood, *op. cit.* pl. 29. Paul Durrieu points out in "L'Origine du Psautier d'Utrecht," Paris, 1895, p. 8 and 9, that although the style is of Anglo-Saxon origin, it was introduced into the Continent and was widely adopted by Carlovingian artists; on page 18 a drawing of the letter in question is given and Mr. Durrieu states that he considers it in the purest style of the Rheims School.

‡ Westwood, *op. cit.* pl. 29 and 30.

§ For illustrations of these see Cahier et Martin "Mélanges d'Archéologie," I. pl. X. and XI.; Labarte "Hist. des Arts Industriels, etc.," I. pl. XXX. and XXXI.

MS. 603. He points out another ivory in the Museum of the Antiquarian Society of Zurich,* which is evidently the work of the artist who chiselled the Paris plaque; he, too, follows the miniaturist of the Utrecht Psalter in his illustration to Ps. 26. In another letter to the Athenæum (Sept. 19, 1874, p. 384) Professor Westwood states that he has since been to Paris and examined the ivory carvings in question, and that he finds that the carving on the back of the cover, representing the story of David and Uriah, is identical with one of the Utrecht Psalter drawings, with the exception that Bathsheba in the ivory holds in her hand a spindle suspended by a thread, which the carver has mistaken for the twisted end of a curtain suspended beneath the arch of the building. Prof. Westwood further mentions an illustration in the Psalter of the Cathedral of Troyes, written in the 9th c. for Count Henri le Libéral, in which the artist has again followed the Utrecht Psalter in his conception of a miniature illustrating the Psalm *Quid gloriaris*. It is significant that Professor Westwood, after supplying these interesting comparisons, concludes as follows: I make no comment on these Carlovingian ivories being so evidently identical with the Utrecht Psalter drawings.

(2). Sir Thos. Duffus Hardy's Report on the Athanasian Creed in connection with the Utrecht Psalter, issued in 1872, has already been referred to above; his conclusions are very definite: he assigns the MS. to the 6th century and gives it an Oriental origin (see above p. 344).

(3). Sir Thos. Duffus Hardy's Report led to the making of further enquiries. The precious MS. itself was sent over to the British Museum by the authorities at Utrecht, and deposited there for inspection. During this time the MS. was photographed, folio by folio, by the Palæographical Society and

* See "Zürich und das schweizerische Landes-Museum," 1890, in 4to., pl. XXXI.; also Emile Molinier, "Hist. gén. des arts appliqués à l'industrie," Tom. I. P. 124. With two illustrations in the text.

reproduced in fac-simile by the permanent Autotype process,* and the immediate result of Sir Thos. Duffus Hardy's Report was an important treatise compiled in 1874 by eight experts in the form of reports, addressed to the Trustees of the British Museum, on the age of the MS. by E. A. Bond; E. M. Thompson; the Rev. H. O. Coxe (of the Bodleian); the Rev. S. S. Lewis (of Corpus Christi); Sir M. Digby Wyatt; Prof. Westwood; Mr. F. H. Dickinson and Prof. Swainson, with a preface by A. Penrhyn Stanley, D.D., Dean of Westminster. The general concensus of opinion from these experts placed the date in the 8th or 9th cent. at the earliest, while admitting in the MS. evidence indicating that it was a copy by an Anglo-Saxon artist from an older work, possibly of the 6th cent. Thus, some of the leading palæographical experts in our country found it impossible after a deliberate and lengthy examination of the MS., to agree as to the date, and the controversy continued for some time between two parties, of which Sir Thos. Duffus Hardy led the sixth-century men against Mr. Bond, Keeper of the MSS. at the British Museum, and Mr. Thompson, Assistant Keeper of the MSS., and the Rev. H. O. Coxe, who represented the ninth-century men.†

(4). This important discussion drew forth a second report by Sir Thos. Duffus Hardy, written after making an elaborate study of the whole MS., which fully confirmed the opinion arrived at in 1872, when as yet he had only had the opportunity of examining a few pages of the MS. This book‡ forms an exhaustive and most valuable treatise which passes in review the

* Published by Messrs. Spencer, Sawyer, Bird and Co., 1873. Press-mark at the British Museum, C. 35.—k. 8.

† For a lucid review of these reports numbered above 2, 3 and 4, See "Athenæum," July 18, 1874, pp.71-74.

‡ "Further Report on the Utrecht Psalter; in Answer to the Eight Reports made to the Trustees of the British Museum, edited by the Dean Westminster." 1874.

palæography of Europe between the years 500 and 900. In an appendix is an interesting letter from Mr. Howard Payn, who considers that the probabilities are in favour of the artist having been an inhabitant of Alexandria, well acquainted with Syria. He places the date of the MS. between the death of S. Anastasius in 373 A.D. and the destruction of the Library at Alexandria in 638 A.D.

(5). The next contribution to the literature of the Utrecht Psalter is the important monograph by the pen of Mr. Walter De Gray Birch, F.R.S.L., Senior Assistant of the Department of MSS. in the British Museum: "The History, Art and Palæography of the MS. styled the Utrecht Psalter." London, 1876. Mr. Birch here gives a careful summary of all the previous literature of the subject, from the time when the MS. formed part of Sir Robert Cotton's famous collection of MSS., analysing carefully and with impartiality the various documents, while not concealing his own opinion, which coincides with that of Mr. Bond and the ninth-century men. The history of the MS. as far as it is known up to the time when it was presented to the Utrecht University, as well as a detailed description of the MS. are included in the volume.

(6). This, as far as I know, concludes the disquisition on the Utrecht Psalter as far as England is concerned, and the scene now shifts abroad to Germany. Anton Springer makes the Utrecht Psalter the basis of a paper on the illustration of the Psalter in the early middle ages.* Springer looks upon the Utrecht Psalter as the naïve production of Western-European early mediæval culture; he considers that the miniaturist was no copyist, that his designs were original, and that over-

* "Die Psalter-Illustrationen im frühen Mittelalter, mit besonderer Rücksicht auf den Utrecht Psalter. Ein Beitrag zur Geschichte der Miniatur-malerei, von Anton Springer, Mitglied d. Konigl: Sächs, Ges. d. Wissenschaften; Abhandlungen. d. K. S. Ges. d. Wissenschaften. Band XIX. Leipzig, 1883. Philologisch-historische Classe. Band VIII., pp. 187-296. With 10 fac-simile plates in autotype from the MS.

whelming influence points to his being of Anglo-Saxon nationality, his grounds being duly set forth and comparisons and parallels instituted between the Utrecht Psalter and other psalters of the Carlovingian period, concerning which valuable information is given.

(7). Up to this time, with the exception of Sir Thos. Duffus Hardy, all the authorities were agreed on certain broad lines about the approximate date of the famous Psalter, and the country of origin. Adolph Goldschmidt, in an article: "*Der Utrecht Psalter*,"* was the first to endeavour to discover other Carlovingian MSS. displaying the same stylistic characteristics as the Utrecht Psalter, and of the same period, *i.e.*, not later than the ninth, or earlier than the eighth cent. A group of such MSS. of the late Xth., XI. and XII. c., executed in England and the North of France, and illustrated with pen and ink sketches in bistre or in colours, was indeed already known as the product of the Winchester School or as *Opus. Anglicum;* it includes the Cotton MS., Tiberius C. VI., British Museum, XI. c.; the Missal of Bishop Leofric (X. c.) in the Bodleian, Oxford; Treatise *de Virginitate*, copied by Bishop Aldhelm, X. c., now in the Archiepiscopal Palace at Lambeth; the metrical paraphrase of Cædmon in the Bodleian†; the Cotton MS., Titus D. XXII., British Museum, *an Officium S. Crucis*, executed between 1012-1020, in Newminster, near Winchester; and the Benedictionale of Æthelwold from the same school as the latter. To these Anglo-Saxon MSS. Professor Westwood had already drawn attention in 1868‡; Goldschmidt was the first, however, to draw comparisons between the Utrecht Psalter and the Evangeliarium of Ebo, preserved in the Library at Epernay. Ebo, or Ebbon, was Bishop of Rheims between

* "Repertorium für Kunstwissenschaft," Band XV., Stuttgart, 1892, pp 156-166.

† See "Archæologia," Vol. XXIV., p. 324, where the drawings are reproduced.

‡ Fac-similes of Miniatures and Ornaments, etc., p. 98 et seq.

816 and 835, during the reign of Louis le Débonnaire, son of Charlemagne, and the origin of the work executed for him is clearly indicated in some dedicatory verses, which inform us that the MS.* was written and illuminated in his diocese, in the Monastery of Hautvillers (Altumvillare) near Epernay, under the Abbot Petrus, at some time previous to the year 835. The style of the 12 richly illuminated canon-tables differs entirely from that of all the other Carlovingian schools, but closely resembles that of the Utrecht Psalter; more especially in the case of the small figures in wash outlined in ink which ornament the canon-tables. In the pictures of the four evangelists which are in wash, St. Matthew† bears a striking resemblance to the evangelist in the first full page illustration to the Utrecht Psalter. The style of drawings is identical in both MSS., but in the one case the artist used the pen and in the other the brush. Goldschmidt argues that we cannot go far wrong in seeing in the illustrators of the two MSS., a single personality; in any case, the scene of the activities of both artists must have been closely related in one and the same monastery, or at the very least in the same school of art. The diocese of Rheims with Hautvillers as a nucleus, produced in the first half of the ninth century a group of MSS. standing alone and closely characterised in style and conception; to this group belong first

* See Paulin Paris: "Comptes Rendus de l'Académie des Inscriptions"; 4e. Série, Tom. VI, 1878, p. 97; Ed. Aubert: "Manuscrit de l'Abbaye de Hautvillers, dit Evangéliaire d'Ebon." Paris, 1880; extrait des Mémoires de la Soc. des Antiquaires de France, avec planches. Le Comte Auguste de Bastard: "Peintures et Ornements des MSS.," etc., pl. 119-122 (nomenclature Delisle), which has been followed in re-arranging the copy at the British Museum; and "Die Trierer Ada-Handschrift" Leipzig. 1889, p. 93. Text by H. Janitschek, and pl. XXXV. and XXXVI.; Samuel Berger; "Histoire de la Vulgate," p. 278; Paul Durrieu: "L'origine du MS. célèbre dit le Psautier d'Utrecht," Paris, 1895, pl. 1 and 2 and text.

† There are besides three more miniatures of St. Matthew belonging to this school of painting which closely resemble these two: See Georg Swarzenski, "Die Karolingische Malerei u. Plastik in Reims." Jahrbuch der K. Preuss. Kunstsammlungen, Band 23. Berlin, 1902, p. 85 (plate).

of all the Utrecht Psalter, the Evangeliarium of Ebo, and the Psalter of Troyes; secondly the Hincmar* Evangeliarium; the Evangeliarium of Loysel, the Evangeliarium of Blois and the Douce Psalter in Oxford.

Goldschmidt, perhaps independently of Prof. Westwood, also noticed the similarity in conception between the scenes illustrating Ps. 56 on the ivory carvings of the binding of the Psalter of Charles le Chauve and in the Utrecht Psalter, to which reference has already been made. The greatest resemblance in the style of the drawings, however, exists in two illustrations bound up with a manuscript copy of the works of Hrabanus Maurus, now in the Königliche Landesbibliothek, Düsseldorf. This MS., attributed from its palæographical characteristics to the 10th century, is preceded by a folio containing two pen and ink sketches, and other folios, fragments of an Evangeliarium which are in no way connected with Hrabanus Maurus† and evidently of earlier date. A poem inserted between these two parts of the MS. points to the monastery of St. Florini in Coblenz, as origin of the work. The drawings, which are of the greatest interest, are in bistre, and the figures, nearly approximating in size those of the Utrecht Psalter, are so identical in all characteristics with the latter that the two Düsseldorf drawings might easily be mistaken for illustrations from the Psalter. Goldschmidt observes in conclusion, that as Coblenz was known to have had very close relations with the Frankish Emperor, Louis le Débonnaire, the striking similarity in style forms but a further confirmation of his view that the origin of the Utrecht Psalter must be sought in France and not in England. Goldschmidt

* Hincmar succeeded Ebo as Archbishop of Rheims. See Paul Durrieu, "L'Origine du MS. célèbre dit Psautier d'Utrecht, Paris," 1895, p. 12-14.

† For a reproduction see Jahrbücher des Verein von Altersthumsfreunden des Rheinlandes, Heft 72. Tafel. IV. and V. with text by H. Otte.

then propounds several questions on points to which he has not yet found a satisfactory answer.

(1). In what spot in Hautvillers did this school form its style and conception?

(2). To what extent was Anglo-Saxon art represented there?

(3). To what extent did originality in design predominate?

(4). What were the models or prototypes? Late Roman, or Byzantine and to what extent were they used?

These queries are taken up again later and answered by Goldschmidt and others.

(8). Franz Friedrich Leitschuh, of Strassburg University, was the next writer who, in his history of Carlovingian painting,* devoted earnest consideration to the subject of the Utrecht Psalter. This interesting volume was, in its original form, written in 1887 and won the prize awarded by the philosophical faculty of the Kaiser-Wilhelm University in Strassburg; the publication of the revised work was eventually unavoidably delayed. Leitschuh calls the Utrecht Psalter one of the milestones in the artistic activity of the period, and considers that the artist has produced original pictures. Like Springer, he upholds the Anglo-Saxon origin of the artist, who was the most important vehicle of Anglo-Saxon influence, and states that the Psalter is related in form and technique to other Anglo-Saxon MSS. A whole group of Psalters felt this influence, the Utrecht Psalter is the nucleus of the group and may be used as a collective designation for the stylistic tendencies of the whole. Leitschuh also notices the close relation that exists in the conception of the ivory carving on the binding of Charles le Chauve's Psalter, and cites as another example the gold relief binding of the Codex Aureus of St. Emmeran, now in Munich.†

* Geschichte der Karolingischen Malerei, ihr Bilderkreis u. Seine Quellen. 59 illustrations, Berlin, 1894, p. 321-330.

† See Labarte, "Hist. des Arts Industriels," pl. XXXIV. Photograph by Hanfstaengl, Munich.

The various Carlovingian schools of miniature-painting were, he considers, more or less influenced by Anglo-Saxon art, or at least related to it. The school of Rheims alone absorbed the full tide of this influence without foreign admixture; in Corbie, Anglo-Saxon material was utilised; but Tours was not indebted to Anglo-Saxon influence, in spite of an obvious resemblance in the *motifs* used but had rather drawn from the same source, *i.e.*, late classical art. Metz had evidently had access to some other MS. similar to the Utrecht Psalter, from which was borrowed the idea of drawing scenes full of movement on a small scale.

The question of the Carlovingian schools of illumination which has been treated very clearly by H. Janitschek, Leitschuh's master and monitor, will receive more attention later on. The year 1895 brings contributions to the question of the Utrecht Psalter from Goldschmidt and Paul Durrieu.

(9). Adolph Goldschmidt in his monograph on the Albani Psalter,* gives us a reply to some of the queries with which he concludes the former article. (No. 7). Facts, he avers, can be cited to show that the conception of the illustrations of the Utrecht Psalter was not only derived from an older civilisation (early Byzantine) but was directly copied from a model. Into these comparisons and deductions we may not, for want of space, follow him in his argument, his conclusions must suffice: in any case Psalters with verse illustration, such as the Utrecht Psalter and the Stuttgart Psalter† (10th cent.), are no original creations of the younger civilisation North of the Alps. The Eadwine Psalter, XII. cent., now in Trinity College, Cambridge, written at Canterbury, is a copy of the Utrecht Psalter with

* "Der Albani-Psalter in Hildesheim und Seine Beziehung zur Symbolischen Kirchensculptur des XII. Jahrhunderts," with 8 plates and 44 illustrations, Berlin, 1895.

† For reproductions of the miniatures see Hefner-Alteneck. "Trachten d. Christlichen Mittelalters."

only a few variations; the text is in three versions, instead of in the one Gallican version; it was not copied from Harleian MS. 603, for this is incomplete, whereas the Eadwine Psalter* agrees with the Utrecht Psalter to the end of the Psalms.

The Paris copy, a Psalter of the 13th century,† and the Cambridge Psalter have many points in common, *some of which do not exist in the Utrecht Psalter*, which seems to show that they were both copies of an original also copied in the Utrecht Psalter, but now lost. The Paris Psalter drawings are not outline sketches, but paintings in body colours on a gold ground.

(10). Paul Durrieu in his pamphlet on the Utrecht Psalter,‡ seems to have come independently to much the same conclusions as Goldschmidt (to whom he does not refer), as to the Utrecht Psalter being a product of the school of Rheims. It is interesting to find, however, that his arguments are not founded merely on the drawings, but that he succeeds in showing that certain palæographical peculiarities in the uncials used as head lines and initials in the Utrecht Psalter are characteristic of the work of the schools of Rheims and Metz, and *are not to be found in the MSS. of any other school in France or England.* The single ornamental letter, the initial B of the first psalm is, moreover, in pure *style rémois*, which is quite distinct from that of the school of Metz. Léopold Delisle§ had already pointed out a certain resemblance between the miniatures of the

* Add. MSS. 29,273, at the British Museum, contains a few photographic reproductions of illustrations from the Eadwine Psalter and Utrecht Psalter. See also Pl. VII.

† MS. Suppl. Lat. 1194, now 8846 Bibl. Nat., Paris. See Silvestre. Paléographie Universelle for facsimiles of text and initials; one reproduction of the drawing illustrating Ps. II. in Cahier and Martin, Mélanges, d'Archéologie. Tom. I., pl. 45, p. 252.

‡ "L'Origine du MS. célèbre dit le Psautier d'Utrecht," Paris, 1895.

§ "Mémoire sur d'Anciens Sacramentaires extrait des Mém de. l'Acad. des Inscriptions et Belles-Lettres," Tom. XXXII., 1ère partie, p. 102.

Sacramentaire de Drogon* (Metz School) and those of the Utrecht Psalter; Durrieu shows the great similarity in the little drawings on the Canon Tables of the Evangeliarium of Ebo to certain drawings and single figures taken from the Utrecht Psalter, not only by means of a description, but by reproductions in juxtaposition on two plates, published in the pamphlet. Durrieu's conclusions are thus based on palæographical characteristics of the initials as well as on the illustrations.

(11). At the XI. International Oriental Congress in Paris, 1897, Byzantine section, a paper was read by Hans Graeven, "Die Vorlage des Utrecht Psalters"† which, as the title indicates, treats of the Greek prototype of the famous psalter. Graeven duly acknowledges the work of other writers already noticed above, and especially of Goldschmidt, who, although inclined to believe in a Greek prototype, reminds us that we possess no illustrated early Christian Psalters, nor have we sufficient knowledge of the liturgy of those early days of the Christian church to enable us to state with certainty that the prototype of the Utrecht Psalter was not late-Roman rather than Byzantine. Graeven, however, feels convinced that the drawings of the Utrecht Psalter were executed to illustrate a Greek text; his reasons, given in detail, are out of place here. The Utrecht Psalter forms but one more link in the chain of evidence that mediæval art has assimilated the wealth of prototypes produced by early Christian art in its palmy days of the fourth century, in close connection with the art of Græco-Roman antiquity. In these productions, the Greek artists were surely more strongly represented than the Latin nation, which was less gifted in the pictorial arts. These Greek artists were not necessarily to be found in Constantinople alone; they have left numerous traces in Egypt, and we must bear in mind the

* See Durrieu's pamphlet.

† Published in Repertroium f. Kunstwissenschaft. Bd. XXI. Stuttgart, 1898, p. 28-35.

work of the two great centres of culture, Alexandria and Antiochia.

(12). The most exhaustive monograph on the Utrecht Psalter is perhaps that of the distinguished Finn, J. J. Tikkanen.* Relying on the evidences of a number of objects singled out from the illustrations, which could not have existed in any early Christian MS., Tikkanen pronounces with strong conviction against the theory of a prototype, and in favour of the Utrecht Psalter being a fairly independent illustration due to Carlovingian art, but he rejects the Anglo-Saxon nationality of the artist because all the MSS. exhibiting characteristics of style similar to the Utrecht Psalter are of later date, *i.e.*, late tenth to twelfth. Tikkanen, however, admits the evidences of the influence of late Roman and early Christian art and that adaptation and borrowing from antique art had always been a tendency of the Rheims school to which the Utrecht Psalter belongs, and which may be explained by the strong stratum of Roman culture traceable in the diocese of Rheims. Finally Tikkanen allows that the relation of the Utrecht Psalter to ancient art appears to be, as far as the *motifs* are concerned, rather a conscious borrowing than a slavish copying.†

(13). Georg Swarzenski in his paper on Carlovingian art in Rheims,‡ accepting the Utrecht Psalter as a product of the Rheims school of miniaturists, finds in spite of all that has been written on the subject, a new ray of light to cast on the much-discussed question of the origin of the famous psalter. In reviewing H. Janitschek's classification of the Carlovingian

* Abendländische Psalter Illustration. Die Psalter Illustration im Mittelalter. Part III., Der Utrecht Psalter. Helsingfors, 1900. 320 pp., 4to, with 77 illustrations in the text.

† See p. 311.

‡ "Die Karolingische Malerei und Plastik in Reims." Jahrbuch d. K. Preussischen Kunstsammlungen Bd. XXIII., Berlin, 1902. pp. 81-100.

schools of painting* given further on (facing p. 367). Swarzenski contends that the MSS. attributed by the former to the Palatine school (see Schola Palatina Plate facing p. 367) are all works of the Rheims school, setting forth his reasons clearly and convincingly. This proposition enables him to develop his theory as to the origin of the Utrecht Psalter with ease and simplicity. The remarkable tendency of the Utrecht Psalter and of the group of closely related MSS., does not form the basis and beginning of an independent school, but appears as an important secondary tendency due to the personality of an extraordinarily gifted artist in an already established school —that of Rheims. It does not reveal itself as an indefinite tendency, evolving and feeling its way, but as a perfect, complete force, which takes up its stand boldly, side by side with the established school. The very fact that we observe the influence of a tendency, so foreign in style and technique to French soil, without being able to trace its evolution, taken in conjunction with its characteristics, forces us to the conclusion that it came from outside—that is from England. The artist of the Utrecht Psalter and his colleagues, form a parallel to that other Northern French school, called by the French the Franco-Saxon, whose drawing of the living form entirely coincides with that of the other French schools, whereas its beautiful ornamentation displays the same Anglo-Saxon influence which our artist infused into the figure drawing of the Rheims school. Regarded from the point of view of technique alone, this tendency assumes but a temporary local significance, whose gradual effacement is less a sign of decay, than a return to the well-worn track. This theory is simple, convincing and tends to reconcile many antagonistic points in the opinions quoted above.

* "Die Trierer Ada-Handschrift." Index (see plate facing p. 367. note 1 for full title).

The passionate impetuosity in conception, the energy of the illustration, the eccentric mobile pathos of gesture, the improvising ingenuity of the technique have no parallel in autochtonic French painting. The remarkable gift of this talented artist followed the same direction as the Anglo-Saxon miniature-painting of the early middle ages and produced the most important achievement of the whole of the contemporary Western School of painting. In his other work, the Ebo Evangeliarium, he has shown himself under the influence of Continental Carlovingian art and more especially of that of the Renaissance School of Rheims, which stood foremost in the revival of the late antique art. It is more difficult to trace the relation of the Utrecht Psalter to Carlovingian art. This stupendous digest (redaction) for it was neither an absolute copy nor an absolutely new creation, and most certainly not a tradition, is an undertaking which betrays the consciously directed energy of the Frankish race, with its passion for collecting and its intimate knowledge of the monuments of art, which the Frankish empire was so exceptionally able to procure.* This cycle bears the unmistakable impress of Carlovingian and not of Anglo-Saxon spirit, but nevertheless its main characteristics are purely English. One might say that the artistic inspiration was due to English influence, but that the execution was Carlovingian.

(14). The last contribution to the subject of the Utrecht Psalter is a paper by Ormonde M. Dalton, M.A., F.S.A., on "The Crystal of Lothair,"† read before the Society of Antiquaries. The Crystal, now preserved in the British Museum, is engraved in intaglio with eight scenes from the story of Susanna; each accompanied by a descriptive legend in Latin. In the centre is the inscription "*Lotharius Rex Francorum Fieri jussit.*" It is a disputed point to which Lothair this applies; both

* Swarzenski, p. 83.

† "Archæologia," Vol. LIX., 1904.

SCHOOLS OF CARLOVINGIAN ART.

ILLUMINATED MANUSCRIPTS.

COLLATED FROM JANITSCHEK.[1] SWARZENSKI.[2] P. DURRIEU.[3]

TOURS.	METZ. Flourished till Middle of 9th cent.	SCHOLA PALATINA.[5]	RHEIMS. Flourished till end of 9th cent.	ST. DENIS OR FRANCO-SAXON.	CORBIE.
(1) Alcuin Bible, Zurich. Cantonal Libr. A.D. 800.	(1) Ev. of Godescale. Paris. Bibl. Nat. MS. Lat. 1993. A.D. 780.	(1) Evang. (so-called) of Charlemagne. Vienna, Schatzkammer. (J.)[6]	(1) Evang. of Ebo. Bibl. Comm. Epernay.[7]	(1) Ev. of Francis II.[11]	(1) Sacr. of Hrodadus. Paris, Bibl. Nat.
(2) Alcuin Bible, Vallicella. Oratory of Vallicella. Rome, B. 6. A.D. 780.	(2) Evangeliarium, Bibl. de l'Arsenal Paris.	(2) Evangeliarium, Brussels. (J.)	(2) Gospels of Loysel.[8] Paris, Bibl. Nat., MS., Lat. 17968.	(2) Bible of St. Denis, Paris, Bibl. Nat. MS., Lat. No. 2. A.D. 870.	(2) Psalter of Charles le Chauve Paris Bibl. Nat., MS., Lat. 1152.
(3) Alcuin Bible, Bamberg. A.D. 800. K. Bibl. A. I., 5.	(3) Golden Gospels of Athelstan. Harley MS. 2788 Brit. Mus. A.D. 835.	(3) Evangeliarium Domschatz Aachen. (J.)	(3) Gospels of Blois and Fontainebleau. Paris, Bibl. Nat., MS., Lat. 265.	(3) Sacram. Paris, Bibl. Nat., MS., Lat. 2290.	(3) Charles le Chauve's Prayer Book. K. Schatzkammer, Munich.
(4) Alcuin Bible, British Museum. A.D. 800. Add. MS. 10546.	(4) Evangeliarium Abbeville, Bibl. Communale, No. 4.	Ada Evang. Treves Stadtbibl. No. 22.[4] (S.)	(4) Evang. Cleves. Berlin, K., Bibl. Cod. Theol., Lat. 260.	(4) Evang. of St. Vast.	(4) Gospels of Charles le Chauve "Goldenes Buch," of St. Emmeram. K. Bibl., Munich (Cim. 55).
(5) Rorico Bible, Paris, Bibl. Nat., No. 3.	(5) Ada Evang. Treves.[4] Staatsbibl., No. 22.		(5) Physiologus. Stadt Bibl. Berne, Cod. 318.[12]	(5) Gospels, Lyons.	(5) Bible of St. Paul, dedicated to Charles le Chauve, written by Ingobert. Rome, Mon. St Callixtus (formerly in Mon. St. Paul).[13] A.D. 860.
(6) Lothair Evang., Paris, Bibl. Nat. Anc. fonds lat. 276. A.D. 850.	(6) Golden Gospels of St. Médard of Soissons, Paris. Bibl. Nat. MS. Lat. 8850.		(6) Vossianus, 79. Leyden.[9]	(6) Gospels, Boulogne.	(6) Colbert Evang., Paris, Bibl. Nat., MS., Lat. 324.[14]
(7) Bible Charles le Chauve, presented by Count Vivien. Paris, Bibl. Nat. MS. lat. 1.	(7) Evang. Cod. Palat. Lat. 50. Vatican.		(7) Paris, Bibl. Nat. MS., Lat. 5543.	(7) Gospels, Cambrai.	(7) Evang. des Célestins, Paris, Bibl. de l'Arsenal.
(8) Sacram. of Autun. Autun, Libr. of Seminary.	(8) Evang. Capitel-bibl. XIII., Cologne.		(8) Sacr. Rheims, dated 799 A.D., burnt in 1774.[10]	(8) Sacram. de St. Thierry.	(8) Fragment of Sacram. Paris, Bibl., Nat., MS., Lat. 41.
(9) Virgil, Berne.	(9) Psalter of Lothair. Armitage-Bridge House.[17]		(9) Hincmar Bible. Rheims Bibl., No. 1 and 2.	(9) Sacram. de St. Amaud.	(9) Sacr. of Nonantola, sent by Jean, Papal Legate, Paris, to Nonantola. A.D. 876.
(10) Evang: Le Mans.	(10) Sacr. of Drogo. Paris, Bibl. Nat. MS. Lat. 9428.		(10) Gospels, Hincmar, Rheims Bibl., No. 145. (P. D.)	(10) Bible of St. Paul (so-called.)[13] (Delisle.)	(10) Gospels of Charles le Chauve (so-called.) Paris Bibl. Nat. MS., lat. 323.[15]
(11) Evangeliarium, du Fay.	(11) Gospels of Louis le Débonnaire (so-called). Paris Bibl. Nat. MS. Lat. 9388.		(11) Gospels, St. Thierry (Hincmar,) Rheims Bibl., No. 26. (P. D.)	(11) Ev. of Arras.	(11) Replica of No. 10. Darmstadt. Grossh. Bibl. Cod. 746.[16]
(12) Boetius, Bibl. Bamberg. H. J., IV., 12.	(12) Aratus, Germanien MS., Leyden.		(12) Psalter of Troyes (Goldschmidt.)		
	(13) Gospels, Paris, Bibl. Nat., MS., Lat. 9383.		(13) The UTRECHT PSALTER. Cotton MS. Claudius C. 7, formerly in the possession of Sir Robert Cotton, now in the Libr. Utrecht.		
	(14) Gospels, Gandersheim. Veste Coburg.				
	Nos. 10, 11, 13, 14, distinguished by an extraordinary wealth of floral ornament. (Swarzenski).				

Swarzenski (p. 93 and 94) recognizes as branches of the Rheims School the following centres, as evidenced by the MSS emanating therefrom.

Belgium—near Liege. Gospels from Stavelot; one of the Hamilton MSS. now in Berlin. K. Bibl. Hamilton 253. See Neues Archiv. der Ges. f. ält. d. Geschichtskunde VIII., 1883, p. 337. Gospels now in Staatsbibl. Munich. Clm. 5250. Written by Framegaudus, also given as the writer of a Paris MS. 17969.

Bavaria. Two Gospels both in the Staatsbibl. Munich, written for Bishop Anno von Freising (854-875) in Schäftlarn (Cod. Clm. 17011) and in Freising (Cod. Clm. 6215).

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1 Die Trierer Ada-handschrift by K. Menzel, P. Corssen. *H. Janitschek*, A. Schnütgen, F. Bettner, K. Lamprecht. Publ. d. Ges. f. Rhein. Geschichtskunde. Bd. VI., Leipsig, 1889. Index, and pp. 73-167.

2 "Die Karolingische Malerei u. Plastik in Reims." Georg Swarzenski. Jahrb. d. K. Preuss. Kunstsammlungen. Berlin, 1902. Bd. XXIII., pp. 81-100.

3 "L'Origine du Manuscrit célèbre dit Le Psautier d' Utrecht." Paul Durrieu, Paris, 1895. (Extrait des Mélanges Julien Havet, p. 639-657).

4 The Ada. Evangeliarium, of Treves (see Note 1) is referred by Swarzenski to the Palatine School, as a product of the oldest Carlovingian School of Miniaturists, in the absence of any conclusive proof that it belongs to any other school. Swarzenski, p. 90 and 98, Note 1, and Janitschek, p. 63-71 and 88.

5 Swarzenski (Note 2 above) clearly shows that the three MSS. classed by Janitschek in the Schola Palatina—the School of Art founded by Charlemagne—and more especially No. 1, are so closely related to the MSS. of the Rheims School that they can be the work of no other centre of Carlovingian art. See p. 89-90 *et seq.* and Paul Durrieu (Note 3 above) p. 16, Note 2. See also Note 6 below.

6 Gospels. Said to have belonged to Charlemagne. Found in his tomb by Otho III. in 1001. See Joseph, Ritter v. Arneth Uber das Evangelium Karl's d. Grossen in der K. K. Schatzkammer, Wien, 1864 (fac-similes) K. K. Akad. d. Wissenschaften, Phil-Hist. Kl. Band XIII., p. 85-134. Also Janitschek, loc. cit. (Note 1), p. 73 and pl. 18-21. Delisle, Cabinet des MSS. III., p. 319, Waagen "Kunstdenkmäler in Wien," p. 469.

7 See P. Durrieu, p. 13 *et seq.* and pl. I. and II.; Paulin Paris, Comptes Rendus de l'Acad. des Inscriptions. 4e Série. Tom. VI., 1878, p. 97; Edouard Aubert, MS. de l'Abbaye de Hautvilliers dit Evangéliaire d'Ebon. Mém. de la Soc. des Antiquaires de France, Paris, 1880. With plates. Comte de Bastard. Peintures et Ornements des MSS., pl. 119-122 (nomenclature Delisle). Janitschek (see Note 1) p. 93 and pl. 35 and 36. Samuel Berger. Hist. de la Vulgate, p. 278. Swarzenski, p. 81 *et seq.*

8 Paul Durrieu, p. 13 *et seq.* Bastard (op. cit. Note 7) pl. 128-130. Samuel Berger, Hist. de la Vulgate, p. 279; Swarzenski, p. 84 and Note 3 calls this MS. Gospels of Beauvais.

9 See Georg Thiele, "Antike Himmelsbilder," Berlin, 1898, with illustrations, and Swarzenski (loc. cit. Note 2) p. 88, Note 3.

10 See Swarzenski (loc. cit. Note 2) p. 90, written in 799 by the priest, Landpert, at the request of Deacon Godelgaud. One Miniature reproduced by Mabillon. See Ad. Ebner: Quellen u. Forschungen, etc., I., Iter Italicum, p. 454, and Migne Patr. Lat. Vol. 78, p. 545. Delisle (Léopold) Mém. sur d'Anc. Sacram., p. 57.

11 The School of St. Denis, given by Janitschek is identified by Swarzenski (pp. 90 and 95) with the Franco-Saxon School, which was not localised in S. Denis but scattered over the N. of France.

12 See Swarzenski, p. 87 and 88, and Neues Archiv. der Ges. f. ält. Geschichtskunde XXVII., 1901, p. 274.

13 Delisle places this MS. among the masterpieces of the Franco-Saxon School (Swarzenski, p. 95). See J. O. Westwood. "The Bible of the Monastery of St. Paul," with photographic fac-similes of all the miniatures. Oxford, 1876.

14 See Trierer Ada-Handschrift (Note 1 above) p. 101-2; Bastard, pl. 199-200.

15 J. v. Arneth (see Note 6 above) p. 96; Du Sommerard Album. Série 7, pl. X. 39 and 40; Swarzenski, p. 96, states that the Darmstadt Codex 746 is a replica of this MS. (see Note 16 below).

16 See Neues Archiv. f. ält. d. Geschichtskunde XI., 1886, p. 410 *et seq.* Swarzenski (p. 96) detects in Nos. 6, 10 and 11 of the MSS of the Corbie School evidences of the English influence of the Rheims School.

17 Since bequeathed to the British Museum by the late Sir Thos. Brooke.

[*To face page 367.*]

reigned in the 9th cent., between 817-869. The work is evidently Carlovingian and the little figures all gesticulating with outstretched hands and prominent thumbs are reminiscent of the Utrecht Psalter. Mr. Dalton points out that not merely in architecture, but also in the minor arts of MS. illumination and ivory carving, the best work of the 9th and 10th centuries owes much to early Oriental models produced for the most part in Syria and Egypt, and he endorses Graeven's opinion as to the origin of the Utrecht Psalter.

This, then, is the concensus of expert opinion concerning the drawings of the Utrecht Psalter. The question that remains for us to decide is whether any of the opinions stated offer a satisfactory explanation of the probable origin of the musical instruments which the miniaturist of the Utrecht Psalter used so lavishly in illustrating the Psalms. The following table contains a list of the principal Carlovingian illuminated MSS. arranged according to the different art centres in which they were produced, which will be found useful for reference.

Schools of Carlovingian Art. The Plastic Art of the School of Rheims.*

(1). The ivory plaques enriching the binding of the Psalter of Charles le Chauve (see School of Corbie, No. 3, opposite, also Westwood p. 352 above) and for illustrations, Cahier et Martin Mélanges d'Archéologie, I., pl. X. and XI.; Labarte, Hist. des Arts Indust., I., pl. XXX. and XXXI., J. F. Leitschuh, Gesch. der Karoling. Malerei, p. 324.

(2). "The Marriage of Cana." Brit. Mus. See Westwood, Descript. Catal. of Fictile Ivories, p. 125, No. 278; Græven, Elfenbeinwerke, I., No. 36.

* Swarzenski, p. 91 et seq. Ad. Goldschmidt. (Rep. f. Kunstw. XV.) 1892, p. 166.

(3). "The Crucifixion" on the binding of a MS. in Munich Staatsbibl. Cimelie, 57. See Westwood, Descript. Catal., p. 458, 124, No. 276. Voege. Malerschule, p. 113, *et seq.* P. Weber. Geistliches Schauspiel, etc., p. 22. Taf. IV. Molinier "Ivoires," p. 134.

(4). Plaque in Munich National Mus.: Katalog. V., No. 160; Cahier et Martin Mélanges 1851, pl. VIII., p. 39 *et seq.*

(5). Ivory plaque, St. Thomas. Weimar, Grossh. Museum, and Swarzenski, p. 91, Fig. 6, in which evident resemblances in type, figures, movement, gesticulation, connect the ivory with the work of the Anglo-Saxon miniaturist of the Rheims School; the same remark applies to No. 6 below.

(6). Ivory plaque. IX. Schweizerisches, Landes-Museum, Zürich, representing a scene from Ps. XXVI., which is considered to be a copy of the illustration to the same Psalm in the Utrecht Psalter or some other Psalter, of which the latter was a copy. See Molinier (Emile), "Histoire générale des arts appliqués à l'industrie, Tom. I., pp. 124, 125; and Zürich und das Schweizerische Landes-Museum." Zürich, 1890, in 4to, pl. XXXI.

(7). Gold Relief from the binding of a MS. of the Gospels at Lindau which was formerly in the Ashburnham Collection. Swarzenski, p. 92 and 95, Fig. 8; Vetusta Monumenta, Vol. VI., Westminster, 1885, pl. II.

(8). "The Crystal of Lothair" in the Brit. Museum, representing the Story of Susanna and the Elders. Archæologia, 1904, Vol. LIX. Article by Ormonde Dalton with plate.

We will now consider the various hypothetical nationalities which might be assigned to the musical instruments in the Utrecht Psalter according to the opinions held by the various experts as to the origin of the MS.

(1). Anglo-Saxon, in actual use in the IXth cent.

(2). Carlovingian { actually in use in the diocese of Rheims. IXth cent.

(3). Late classical.	Presumably made known by means of illuminated MSS. treasured in the libraries of the monasteries of the diocese of Rheims.
(4). Early Romano-Christian.	
(5). Byzantine.	
(6). Greek from Syria or North Egypt.	

According to Dr. Swarzenski's opinion, which, besides being the most recent, also seems to reconcile the most essential points of all the other arguments instead of refuting them, the artist responsible for the miniatures of the Utrecht Psalter was an Anglo-Saxon working in the diocese of Rheims during the ninth century. His conception, the life, energy and movement infused into the little drawings were due directly to Anglo-Saxon feeling or influence, just as the wealth of ornament characterising the work of the Franco-Saxon school bore the impress of the Anglo-Saxon art of the day, while the scenes depicted are entirely in the style of the other French schools of the Carlovingian period. The Anglo-Saxon characteristics of the Utrecht Psalter are only to be traced in the work of the Rheims school of the time of Charles le Chauve, after which they gradually vanish, from which circumstance it seems not unreasonable to attribute them to the strong personality of a talented artist.

From what source did this artist draw his inspiration in illustrating the musical scenes? Did he give his musicians the real instruments he had seen in use around him, or did he copy them from the older MSS. from which he had derived his training—MSS. obtained from the Roman and the Byzantine empires? If the instruments were actually in use, they would be those known either to the Anglo-Saxons or to the Franks of the diocese of Rheims. One might in this case

reasonably expect to find traces of these instruments in other MSS. of the same period or at least in those of the succeeding centuries such as the 11th, when England and France had begun to free themselves from the influences of classical art, and to strive to express themselves and their own life. One might also expect to find the instruments drawn with some degree of understanding in those copies of the Utrecht Psalter which have survived, if the objects were familiar to the miniaturist.

The examination (unfortunately by no means an exhaustive one), of the Anglo-Saxon, Carlovingian and French MSS.* and monuments of the 8th to the 11th centuries accessible either as originals, in fac-simile, or as reproductions of more or less correct drawings, has not disclosed any trace of the kithara in its 2nd or 3rd transitions.

Collected in this chapter are the musical instruments from the MSS. of the Carlovingian and other contemporary schools, together with those derived from Anglo-Saxon copies of the Utrecht Psalter of later date; there is among them all only one instrument with a neck which is in any way reminiscent of the instruments in the Utrecht Psalter, *i.e.*, the one from the miniature of King David in the Psalter of Lothair, to which reference is made later on. As far as these MSS. are concerned, the development of the kithara stopped short at the rotta, the first of the transitions, which appears to have been a favourite instrument in Germany, France and England from the 6th to the 12th cent. The instruments from the Psalter of Lothair (Pl. I. and V.) from the Psalterium Aureum, St. Gallen (Fig. 151) from the Psalterium of Labeo Notker, St. Gallen (Fig. 149 and Pl. IV.) and from the Evangeliarium of St. Médard of Soissons (Fig. 145) are all oriental instruments

* The theological illuminated MSS. most productive of material for the archæology of music are Bibles, Psalters and the Apocalypse.

Plate IV.

FROM THE PSALTER OF LABEO NOTKER, XTH CENTURY, ST. GALLEN. SHOWING A REBAB,* TWO ROTTAS AND A SMALL HARP.

From a Photograph specially taken for this work by Schobinger and Sandherr. St. Gallen.

* See Appendix *Rebab* and c.f. Fig. 149.

derived from the Egyptian or older Asiatic civilisations and disseminated in Europe mainly through the Arabs. These instruments have one common feature of construction, *i.e.*, the vaulted back and flat sound-board and a neck formed by the gradual narrowing of the body; in short their essential features are diametrically opposed to those of the kithara and guitar-fiddle, the immediate ancestors of the violin family. It is a remarkable fact that the instruments in question all emanate from MSS. executed in the very localities in which were situated the three schools of music founded by Charlemagne who was known to have assimilated much of the art and learning of the Arabs:

(1). Metz. The Psalter of Lothair.
(2). Soissons. The Evangeliarium of St. Médard.
(3). St. Gallen. The Psalterium Aureum.
The Psalterium of Labeo Notker.

The instrument from the Psalter of Lothair of which body and neck seem to be in one piece and the back vaulted, has some affinity with the spoon-shaped nofre of the Egyptians wide in the shoulders and tapering to a rounded apex, which occurs so frequently among the hieroglyphs.* It seems reasonable to suppose that we have here an instrument in actual use at the time the miniature was painted, and familiar to the artist. The Metz school of miniature painting is characterised by imitation of Roman models, but the instrument from the Psalter of Lothair does not occur, as far as I know, among those found on Roman monuments or MSS. extant. It does, however, slightly resemble the one taken from the illustration to Psalm 107 of the Utrecht Psalter (Pl. VI., 1)†; moreover in the copy of this famous Psalter Harl. MS. 603, British Museum, of the 11th cent., the copyist has drawn in the instrument with great delicacy; and such details as bridge and tail-piece, which in the

* As, for example, in the Theban recension of the Book of the Dead. A papyrus with coloured vignettes written in 1050 B.C. British Museum.

† And also the rebab in the top left hand corner of Pl. IV. (Labeo Notker's Psalter.)

original were blurred and indistinct, stand out with wonderful clearness; from which we may conclude that the artist thought he recognised the instrument, and accordingly drew it with understanding. One cannot be quite sure on account of the smallness and indistinctness of the drawing in the Utrecht Psalter that this is really the type of instrument which is given in the illustration to Psalm 107 (Pl. VI., 1), or whether this was a variant of the instrument in Fig. 121.

When we compare the other instruments which occur in both original and copy, we find that the copyist has been nonplussed, as in Fig. 120, for instance, which in the Utrecht Psalter is so vague and indistinct that it might be taken for a skin-bottle; this in the Harl. MS. is faithfully copied without improvements. Unfortunately, the most important instruments are omitted in Harl. 603, *i.e.*:

Ps. CXXXIV. (Fig. 123) is differently illustrated and contains no musical instrument.

Ps. CXLIII. being the last copied in the Harl. MS., Fig. 126, (Pl. III.) and the page illustrating the 150th Psalm, in which is the famous picture of the Hydraulic organ (Pl. VI.), and the large rotta (Fig. 117), are both absent.

Ps. LXXX. (Fig. 125), is not illustrated either. The Harleian copy has been illustrated by three different hands: from Ps. 1 to 65 by the first; blank spaces are left from Ps. 66 to 100; the second artist whose work was technically very fine and delicate illustrates Ps. 101 to 111 and the third hand, whose work is comparatively coarse, has continued the illustration from Ps. 112 to 143 in similar style, but according to his own ideas, instead of copying the scenes in the Utrecht Psalter.

The Canterbury artist who made the copy of the Utrecht Psalter known as the Eadwine or Cambridge Psalter (12th cent.), had evidently no knowledge of the instruments he was copying, judging from his fanciful and utterly unpractical

Plate V.

FROM THE PSALTER OF LOTHAIR. AT ARMITAGE-BRIDGE HOUSE. IXTH CENTURY.

Photograph presented by the late Sir Thomas Brooke.

drawings* (see Pl. VII.); he may, however, have been an unmusical man, working in an unmusical *milieu*.

The Psalter of Lothair,† now at Armitage Bridge House in the Library of Sir Thomas Brooke, to whose kindness I owe the fine photographs here reproduced of the miniature of King David, and of the carving of King David on the ivory plaque set in the binding of the MS. Here the artist, copying as was the custom, but without understanding, from a miniature in some other MS., such as the Bible of Charles le Chauve, or the Bible of St. Paul (both of which contain similar instruments, see Fig. 115), has produced an impossible instrument; the outline will be recognised as similar to that of Fig. 115, but in the ivory instrument the strings instead of lying over the neck, only, are drawn right across the instrument, leaving no space for the hand to reach the strings, and stop them; it would moreover be impossible to use a bow to such an instrument, without sounding several strings at once; the bow is of the *cremaillère* type (see Fig. 73), the earliest and most perfect example of the kind yet found. Experts have pointed out that the ivory carving seems to be some two centuries younger than the MS., and was probably executed in the 11th cent., judging from the figure, the pose, the arrangement of the draperies, etc.; the head alone, reminiscent of classical models and full of vigour and life, might be 9th cent. work. The ivory carvings of the Carlovingian period, to some of which reference has been made above, widely differ from this figure

* Add. MS. 29,273 at the British Museum contains a few photographic fac-similes of folios from the Eadwine Psalter presented by the Rev. Canon Swainson, of Cambridge. The important illustration to Ps. 150 (of our version) is one of these and contains a travesty of the instrument given in Fig. 123 above (*cf.* Pl. VII.)

† Known for some years as the Ellis and White Psalter, illustrated by the Palæographical Society, Pl. 70 and 90, Vol. II.

of King David in feeling and technique. A brief sketch of the interesting MS. may prove of interest:

The Psalter of Lothair,* written in gold letters, was bestowed by Louis le Débonnaire, son of Charlemagne, upon the Abbey of St. Hubert in 825 In the Cantatorium† of the Abbey of St. Hubert, in the Ardennes, written in the twelfth century, is an entry stating that upon the occasion of the translation of the body of St. Hubert in 825, Louis le Débonnaire, who was present, made gifts of royal magnificence to the Abbey of St. Hubert, amongst which was a Psalter written in letters of gold. Dr. A. Namur accounts for certain poems in honour of Lothair, written in rustic capitals (whereas the Psalter is in Caroline minuscules with capitals in uncials) and accompanied by the three miniatures, one of which is that of King David (Pl. V.) by stating that they were probably added in the Abbey of St. Hubert after the gift had been made. This statement, a mere hypothesis, as well as the record in the Cantatorium, written three centuries after the events recorded, must be accepted with all due reserve.

The famous MS. underwent many vicissitudes, and Dr. Namur relates that when the fatal influence of the French Revolution was felt in Belgium, Dom Etienne (M. Jacques Bernard Neumann) removed many of the treasures of the Abbey of St. Hubert to a place of safety, restoring them when the monastery was re-opened, but that *he kept* the Psalter and some other MSS. in memory of the Abbey where he had passed the greater part of his life, and he bequeathed them to his nephew.

The group of instruments from the districts in which Charlemagne established the three schools of music, being as before stated undoubtedly derived from the Arabs, either by way of Spain or through Sicily and Southern Italy, are treated more fully in the next chapter.

Our investigation of such musical instruments as are here presented from Carlovingian and Anglo-Saxon MSS. of the 8th to the 11th cent., reveals no single specimen which can claim a place in the evolution of the guitar-fiddle from the Greek kithara, with the exception of the instruments of the Utrecht Psalter and the rotta. Of the latter we find a variety

* A full description and history of the MS. quoted from Dr. A. Namur's account in the "Bulletin du Bibliophile Belge," Sept., 1860, are given in "the Catalogue of the MSS. and printed Books collected by Thomas Brooke, F.S.A., and preserved at Armitage Bridge House, near Huddersfield." Vol. II., p. 530 to 540. London, 1891 (for private circulation); see also "Second Voyage littéraire de deux religieux bénédictins de la congrégation de St. Maur." (Martène et Durand). Paris, 1754, p. 135 to 144.

† Published and translated in 1847 by M. de Robaulx de Soumoy.

Plate VI. (1).

Ps. CVII. Utrecht Psalter. IXth Century. (Reproduced from the Autotype Facsimile in the British Museum).

Photograph by E. J. Clark.

Plate VI. (2).

Ps. CXLIX. Utrecht Psalter. IXth Century, Showing the Hydraulic Organ. (Reproduced from the Autotype Facsimile in the British Museum).

Photograph by E. J. Clark.

of forms in England, France and Germany, some with finger-boards, arguing a great advance in technique, based on the knowledge of instruments with necks, in which by stopping the strings with the fingers several sounds may be produced from each string.

There is every reason to believe that even in those MSS. which are obviously copies from Romano-Christian models, the instruments* depicted were all actually in use at the time for they have been traced both before and after in the process of evolution.

Opinions seems to be divided among the authorities quoted above, who have given earnest consideration to the question of the origin of the Utrecht Psalter, as to the source of the artist's inspiration in thus illustrating the Psalter, psalm by psalm, the Utrecht Psalter being the earliest example extant of the kind. What were the models from which he consciously borrowed local colour, landscape, fauna, flora, classical objects and customs, etc., while infusing into his version—a digest from many sources—a distinctive feeling and vigour characteristic of Anglo-Saxon art of the 9th and succeeding centuries? Reference to the later writings of Goldschmidt,† Graeven,† Swarzenski† and Josef Strzygowski,† in which they state their reasons, leads to the same conclusion, on archæological grounds, as I myself reached independently from the history of the musical instruments with which we are concerned.

A study of such MSS. and monuments of all available sources, covering the first 8 centuries of our era, has revealed but little bearing on the question, that was not already known from the study of antique musical instruments. Examples of

* With the exception, perhaps, of the instrument in Fig. 151 from the Psalterium Aureum of St. Gallen, which occurs in certain Romano-Christian bas-reliefs in the Lateran. For references see Notes to pp. 407-409.

† See Bibliography.

the kithara in a variety of forms, and stages of development,* do indeed abound, for very obvious reasons; there was but a slender hope of finding somewhere a trace of the newer instruments of the Utrecht Psalter, a hope which up to the present has been disappointed.

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* For other illustrations of the kithara not reproduced in this work see the following: "The Vatican Virgil," Cod. Vat. 3225, Rome, 1899. Pict. 8 32 and 36 (see Bibliogr. for full titles). "Picturæ Iliacæ," by Angelo Mai, Mediolani, 1819, pl. X. "Roma Sotterana," by J. Wilpert, Tav. 37 (Orfeo) II. cent.; Tav. 98 (Orfeo) III. cent. "Hist. gén. de l'art appliqué à l'industrie," by Émile Molinier, Tom. I., No. 62. Diptych, VI. cent., Trésor de la Basilique de Monza, Muse with cithara; No. 63, Musée du Louvre. VI. cent., Melpomene with Cithara. "Descript. Catalogue of Fictile Ivories," by J. O. Westwood, No. 25; 'Nouveaux Mélanges d' Archéol." "Ivoires, Miniatures, Émaux," etc., p. 75. Binding of a MS. in the Bibl. de l'Arsenal, Paris, about V. cent. "Catalogo del Museo Nazionale, Firenze" (Collection Carrand) Rome, 1898, p. 204, No. 22 (description only) Roman Art, V. cent. "Die Quedlinburg-Itala Handschrift," by V. Schultze, 1898. p. 13, Taf. I. (lower picture) a golden kithara, very indistinct in the reproduction. "Storia dell' Arte Cristiane," Garrucci III., pl. 130, Cod. Siriaco Laurenziano, 6th cent. Rabulo Evang. "Jahrb. d. Kunsthist. Samml. d. Allerh. Kaiserhauses," Vol. XX., 1899, p. 183, Taf. V. (Wickhoft) from an antique sarcophagus. "Gallerie naz. italiane," III. (1897), pp. 263 and 261, and L'Arte, Vol. I. (1898), p. 24 Ivory Casket, Florence, Carrand Coll., IX. cent., and ditto Cividale, IX. cent. "Antike Vorlagen Byz. Elfenbeinreliefs," Hans Græven, Jahrb. d. K. Preuss. Kunstsamml., Bd. 18 (1897), p. 11. Veroli Casket, South Kensington Mus., IX. cent. "Storia dell' Arte," Garrucci, Vol. V. (Orfeo) pl. 307, No. 4. Pl. 296, No. 4. Vol. II., pl. 4. and pl. 25 and 30. "Le Monastère et la Nécropole de Baouît," Jean Clédat. Le Caire, 1904. Pl. XVI. Chapelle III. (King David playing to Saul). Archæologia, Vol. LX., p. 8. 1906. O. M. Dalton. Silver dish from Cyprus, same type of cithara as the one from Baouit. "Denkm. d. Mittelalters in d. Rheinl." Ernst aus'm Weerth. Leipzig, 1857. pl. XVII. (1). late Roman, VII. cent. "Eine roemische Villa z. Zeit d. Augustus" J. Lessing and A. Mau. Berlin, 1891, pl. VIII. "Bilderkreis des Physiologus, etc., J. Strzygowski. Taf. II. (very primitive), p. 93, ill. in text (Orpheus). "Inscriptions from Cyzicus." F. W. Hasluck, Jnrl. of Hellenic Studies, Vol. 23. London, 1903, p. 88. "Kunstmythologie." Overbeck. Pl. 21, No. 32, No. 14 and 18. Pl. 24, Nos. 20, 24 and 25. Pl. 25, No. 3. Nuovo Bull. di archeol. Cristiana. Rome, 1897. Pl. 1, Orpheus. On an ivory pyxis from Bobbio; Byzantine, 5th or 6th cent.

The instruments of the tamboura and rebab type, oval, pear-shaped, boat-shaped and spoon-shaped found, will be introduced in the next chapter. The past remains absolutely silent and vouchsafes no help in bridging the gulf between the cithara and rotta of the 6th century (Fig. 168) and the guitar-fiddle of the 11th cent. of Byzantine origin (Fig. 173) with the single exception of the instruments of the Utrecht Psalter.

My theory of the origin of the guitar-fiddle and viols was not built up upon the evidence of the Utrecht Psalter, a welcome link in the chain of evolution, which was not discovered until the rest of the structure had been pieced together in spite of the duly recognised gap.

We must not lose sight of the importance and full significance of having the complete evolution of the guitar-fiddle embodied in the one MS., irrespective of the question of origin. The persistent iteration of these instruments throughout the Psalter can hardly be either entirely fortuitous, nor yet intentional; it could only occur naturally and consistently among the people who had themselves been instrumental in the evolution of the kithara. Moreover although these instruments are only used in illustration of the verses containing the word *Kithara* in the Greek version of the Psalms, the original artist has included all the forms of the instrument, which were known to him by that name; thus giving all the steps in the evolution of the kithara; it is evident too from the illustrations that the original artist (not the Anglo-Saxon of Rheims) was acquainted with many musical instruments and made his selection with discrimination and understanding. Where, for example, the only instrument mentioned in the text is *cithara*, we find the cithara in transition of Fig. 121; where the words *cithara* and *psalterium* occur, we get as illustration, Fig. 122, in which both are shown, the Rheims artist is doubtless responsible for the vagueness of outline in this cithara, being probably tempted to see in it an instrument then in use, similar to the one in the

Psalter of Lothair. In the last psalm, the drawing of the hydraulic organ, barring a little misconception in the keyboard, also due no doubt to our Rheims artist, quite tallies with the much more complete and elaborate little model in terra-cotta of a hydraulic organ, assigned to the 2nd cent. A.D., found in the ruins of Carthage and now in the museum there.* See Pl. IX. In the Utrecht Psalter moreover that part of the mechanism of the hydraulus usually contained within the altar or pedestal is very accurately indicated.

One slender thread of evidence in favour of the Syrian or Greek (of Asia Minor or N. Africa) origin of the prototype of the Utrecht Psalter does indeed exist, *i.e.*: In the Gallican version of St. Jerome, in the Vulgate and in the Septuagint versions of Psalm 137 (136 in the Utrecht Psalter), verse 2, we read that the Israelites hung their *organa* upon the trees by the waters of Babylon; in the Hebrew, Chaldee, Syriac and Arabic versions† the word used is not organa but *Kinoora*, interpreted in Latin as *citharas*. It is curious and may be quite accidental, that the original artist here depicts citharas, of the violin form and of the rectangular and delicately arched form so familiar in antique monuments as the kithara of the kitharœdes, whereas the Anglo-Saxon copyist in MS. Harl. 603 the third hand who illustrated independently according to his own ideas, shows us in illustration of this psalm, a fanciful repre-

* See "Music." London, 1898, Fig. 20, p. 482; a series of papers on the Organ of the Ancients. K. Schlesinger. Illustration from somewhat inaccurate drawing. "Researches into the Origin of the Organs of the Ancients." K. Schlesinger. Sammelband d. Intern. Musik Ges. Berlin, 1901, Vol. II., Part II., p. 201 (from a photograph). Loret. Revue Archéol. Paris. 1890, p. 96 (drawing) "Dict. des Antiquitiés Grecques et Romaines." Daremberg et Saglio Article HYDRAULUS. Vol. III., Part I., p. 316. Fig. 3919 (drawing). Photographs of a working model of the Carthage organ made by the Rev. F. W. Galpin are reproduced in "The Story of the Organ," by C. F. Abdy Williams. London, 1903, pp. 211, 212, 213. Grove's Dict. of Music and Musicians, 1906, "Hydraulus."

† See Walton's Polyglot Bible.

sentation of a primitive *organ*, or elaborate set of pan-pipes and a harp, hanging on a tree by the river side. It seems to me that in view of the knowledge of musical instruments displayed elsewhere in the Psalter by the artist, and of his careful selection for the purpose of illustrating the text, we are justified in regarding this as no mere coincidence, but as evidence that the original artist was familiar with the Syriac version.

I feel convinced that the instruments which we find in the Utrecht Psalter, somewhat distorted and vague in outline and sometimes wanting in detail, but nevertheless full of significance, were not the accidental result of Western European experiments; they represent on the contrary the conscious effort of the eclectic æstheticism of the descendants of the Greeks of Hellas, with whom the kithara was a revered tradition connected with the most glorious and noble period of the history of their country's civil and religious life. The Greeks, who so jealously cherished the kithara, having adopted it and exalted it above all other stringed instruments, were alone capable of carrying out the evolution, guided by a fine appreciation of the æsthetic proportions and peculiar construction of the kithara, no less than by national pride.

There is no lack of evidence that the Greeks of Asia Minor were acquainted during the early centuries of our era (and probably before) with stringed instruments with necks, for representations such as Pl. X. (in the British Museum) are not rare. The rebab here illustrated is from one of the friezes which formed the risers of steps to the tope at Jumal-Garhi, in the Yusufzai district of Afghanistan—there are many of these friezes at the British Museum representing scenes of music and dancing in which stringed instruments, pipes and drums abound. The style of these sculptures which are assigned to the second or third century of our era, shows traces of classical influence, introduced probably during the reign of Alexander the Great and of the Greek and Indo-Scythian

princes who succeeded him. A similar instrument (Pl. XI.) from a Sassanian Silver Dish in the British Museum, which is not later than the 7th cent. and probably much earlier, is no doubt the rebab (before the bow was applied to it) which the Arabs state they obtained from the Persians. Both are of the pear-shape so familiar in the MSS. and monuments of the middle ages in the West, such as the Cotton MS., Tib. C. VI. of the XIth. cent. (Fig. 128). These instruments belong to the period to which the original of the Utrecht Psalter may be assigned, but are of quite a different type from anything found therein, they are only mentioned here to show that the Greeks of Asia Minor and Northern Egypt were well acquainted with instruments with necks; from some such specimen they probably conceived the idea of adding a neck to their kithara in order to obtain several notes from each string.* The interesting point is that they did not adopt the whole instrument, but retained the general outline of the cithara with the rounded sound-chest and graceful curves and the principle of constructing the body with ribs.

One or two facts seem to support the theory that the evolution of the kithara took place among the Greeks of Asia Minor or Alexandria: representations of David with his musicians, do not seem to have occurred among the many examples of early Christian Roman art, although in the absence of very early illustrated Psalters, it would be unwise to attach too much importance to such an argument; the conception of the Shepherd-King as psalmist and musician is more likely to have originated in the East or in Lower Egypt during the 6th cent., which seems to have played a great part in the illustrative explanation of the Old Testament.† As an example of this art of

* See Appendix. *Barbiton.*

† See Kondakov. "Hist. de l'Art Byzantin," Paris, 1886. Tom. I. p. 140. "Trierer Ada-Handschrift." H. Janitschek, p. 80 and 81; Springer. loc. cit. (see Bibl.) p. 89.

Plate VIII.

KING DAVID WITH THE SMALL TRIANGULAR HARP. FROM PSALTERIUM OF FOLCHARDUS. IXTH CENTURY. ST. GALLEN.

Photograph by Schobinger and Sandherr. St. Gallen.

illustration practised by the Greeks of N. Africa during the early centuries of our era, we may cite the mural frescoes of the monastery and necropolis of Baouît, illustrating the story of King David (Chapel III.) In one of these frescoes, Saul is depicted, javelin in hand, threatening David, who is playing upon a kithara of somewhat primitive design, having fourteen or fifteen strings.*

Among the early Christian mosaics, mural paintings from the Catacombs and churches, bas-reliefs and sarcophagi, King David does not appear as musician or accompanied by musicians, the first indication of this conception which was so general during the middle ages in Western Europe, occurs as far as I know in the Cosma Indikopleustes of the Vatican,† an illuminated MS., by a native of Alexandria, assigned to the 6th or 7th century; in this we see David and his chorus or choir used decoratively in a medallion, but without musical instruments, perhaps in the classical acceptation of the word chorus.

Another circumstance supporting the above-mentioned theory is the curious coincidence that indirectly connects a second Syriac illuminated MS. with the Utrecht Psalter group. I refer to the Cod. Siriaco, Bibl. Laurenziana, of Florence, sometimes known as the Rabulo-Evangeliarium‡ of the 6th century written in the monastery of St. Giovanni in Zagba, a city of Mesopotamia. The Canon tables are ornamented with little scenes and figures not only on the gables but at the sides of the columns which every now and then are reminiscent of the Ebo Evangeliarium, written and illuminated in the diocese of Rheims, by the same artist who executed the Utrecht Psalter.§

* See work by Jean Clédat in foot-note to p. 376.

† Cod. Vatic. No. 699. See Garrucci, "Storia dell' Arte" III., Pl. 142-153.

‡ See Garrucci, "Storia dell' Arte," III., Pl. 128-140. Text p. 52.

§ See p. 357, 361-2 the summaries of the reports by Goldschmidt and Durrieu.

The little figures in Pl. 137 [Garucci] may well have been archetypes of those in the Ebo MS.;* moreover in the Syrian MS., the originals of the little plants and flowers so characteristic of the gable decoration of the canon tables of the Ebo MS. may be seen on Pl. 132 and 134 (Garrucci).

On the other hand, it cannot be denied that in the mural paintings of the Catacombs† there are many figures reminiscent of those in the Utrecht Psalter, with exaggerated slim legs and fluttering draperies, gesticulating with prominent thumbs, such as in Tav. 13, 25 of the II. cent., Tav. 64, III. cent.

With regard to the models accessible to the Carlovingians, it is a well attested fact that from the time of Charlemagne, they copied early Christian monuments in Italy and the South of France, and that their MSS. and ivory carvings betray a close acquaintance with the sarcophagi and ivories produced during the early centuries of our era. It is however only in recent years that the part played by the Christian East in the development of Frankish art has been appreciated. Evidence is rapidly accumulating that even in the minor arts of MS. illumination and ivory carving, the best work of the 9th and 10th cent. owes much to early oriental models produced mostly in Syria and Egypt.‡ The influence of late classical art would be less felt in Gaul, and that only at second hand, whereas the work of the Christian East, between the 5th and 7th cent. when Syria and Egypt were perhaps the most active art centres, must have found its way to the ports of S. France as a consequence of the commercial intercourse between Gaul and the East.§

* For illustrations of these see Durrieu, Pl. I. and II.. and Bastard's monumental work, Pl. 119 and 120.

† See J. Wilpert's Roma Sotterana.

‡ See "The Crystal of Lothair," by O. M. Dalton. Archæologia, 1904, Vol LIX., p. 29.

§ Idem p. 30.

Plate IX.

Terra-Cotta Model of Hydraulic Organ. Cir. 150 A.D.
Carthage Museum.

Through the Courtesy of Rev. Père Delattre.

CHAPTER IX.

The Influence of the Moors on the Stringed Instruments of Europe.

We must now leave the cithara (of the Greeks) in transition until we can take up the thread again in the guitar-fiddle, but it will be only fair to glance at other contemporary stringed instruments, if only to justify our selection of the cithara as the direct lineal ancestor of the violin.

Before we can rightly determine what influence the Moors exercised on the musical instruments of Europe, through their conquest of Spain (711 A.D.), it will be as well to summarize briefly the stringed instruments known before and after the eighth century. This will enable us, by comparison to see what we owe to the teaching of the Arabs.

The earliest teachers of music in Europe were the Greeks, the Phœnicians, and the Romans; their influence was far-reaching and deeply rooted. Wherever the Roman civilization was implanted we find that the lyre, the cithara, and the small triangular harp, or instruments evolved from them, are prevalent. An almost insuperable difficulty lies in the way of investigating this point: there is so little reliable evidence extant.

Britain remained under Roman domination until the fourth century, and we have found mosaics and representations of rude citharas belonging to that period, of which an example was given in Fig. 111. We saw, moreover, in Chapter VII.,

that two examples of the rotta or cithara in its first transition (Figs. 112 and 113) are represented in illuminated MSS. of the beginning of the eighth century. The Cotton MS., Vespasian A 1, which bears the date 700 A.D., may be considered to represent instruments in use in the seventh century—before the conquest of Spain by the Moors—but we do not need the date to tell us that these rottas and citharas are in no way connected with the Moors. In the Vespasian MS. we also find a small harp. These are, up to the present moment, all the instruments I have been able to find in England up to the eighth century. We must remember that in the oft-quoted verses of Venantius Fortunatus, Bishop of Poictiers in the sixth century—"The Roman praises thee with the lyre, the Barbarian sings to thee with the harp, the Greek with the cithara, and the Briton with the chrotta or rotta"—the rotta is assigned to the Briton. Hence it is possible that the Anglo-Saxons may have learnt to use this instrument from the Britons, for the MS. referred to above is the work of Anglo-Saxon artists. It is not surprising that the Briton should have known the cithara in transition, at a very early period, considering the length of time that Britain remained under the domination of the Romans.

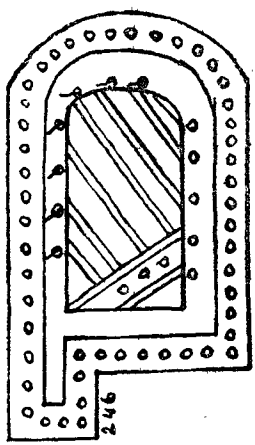


Fig. 127.

Fanciful cythara, eleventh century. Cotton MS. Tib. C. vi., Brit. Mus.

In the absence of evidence during the ninth century, we find an illuminated MS., Cotton, Tib. C. vi. of the tenth to eleventh centuries, which has been considered to throw an important light on the state of music in Anglo-Saxon England. The manuscript contains drawings of several curious musical instruments with obscure explanations in Barbaric Latin. They are evi-

dently of the same kind as those described in the apocryphal letter of St. Jerome *ad Dardanum;* in fact the little sketches give the impression that they represent an unmusical illustrator's endeavour to draw instruments known only from hearsay, and probably from this very apocryphal letter of St. Jerome. Similar instruments occur in the Great Latin Psalter of Boulogne* written in the Abbey of St. Bertin between 989 and 1008 during which period Odbert was Abbot; he decorated the volume which contains most of the instruments in Tib. C. vi. and some others in the same style. It seems probable that the latter MS. may have been a copy of the Boulogne Psalter or that both were copies of some other older MS. The origin of Tib. C. vi. is not definitely known, from archæological and palæographical characteristics it has been referred to Anglo-Saxon England. Some of these curious instruments also occur in MSS. in the libraries of St. Emmeran, (Ratisbon) St. Blasius and Angers.

It is therefore by no means certain that any of these instruments were known in England, although there is a strong probability that the rebec shown in Fig. 128 had found its way to England from the continent. This manuscript is well worth seeing, the drawings are in coloured inks, blue, green, red and black, and some of the instruments are decidedly curious-looking objects. They are not reproduced here, for they have absolutely nothing to do with the violin family, with one exception, but some of them have a place among the precursors of the harp and pianoforte.

The instrument, probably entirely imaginary, given in Fig. 127 is called a cythara in the description, but here applied to a totally different instrument. Fig. 127 has seven strings of different lengths, the principle of the harp and not of the

* See J. O. Westwood, "Fac-similes of Miniatures and Ornaments in Anglo-Saxon MSS.," p. 118.

Fig. 128.
Anglo-Saxon Rebec, eleventh century. Cotton MS., Tib. C. vi., Brit. Mus.

cithara, fastened *à vide* to a rectangular frame by little pegs or pins at one end, and passed at the other through holes to the other side of the frame. In order to allow of different lengths for the strings, they are stretched obliquely in the frame, and three of them are fastened to a little supplementary pin-plate which cuts off a corner; in other stringed instruments shown in the MS., otherwise very similar, called *nabulum* and *psalterium*, the strings are vertical and all of the same length, as in the Greek cithara.

At the beginning of the Psalms in this MS. there is, in addition, the usual figure of King David playing upon a small harp, while above him, on the right, is the figure of Jeduthun (Fig. 128), who, we are told, prophesied with a harp (in Latin, *cythara*). Here we have an entirely different instrument, played with a bow, and resembling the one-stringed gigue shown in the MS. of St. Emmeran, ninth century, as given by Gerbert in his "De Cantu et Musica Sacra" (Fig. 41). This MS. is one of the same group as Tib. C. VI., and the Boulogne Psalter, and all may be copies of the same original now lost, by artists of England, France and Germany. If Gerbert has assigned the correct date to the MS. of S. Emmeran, that may have been the original, since both the others date from the end of the 10th or beginning of the 11th century.

We have in Fig. 128 a pear-shaped instrument of which the

Plate VII.

From the Edwine Psalter, Trinity Coll., Cambridge. XIth Century. Anglo-Saxon. (Compare with Pl. VI, 2).

From a photograph specially taken for this work by Mason and Basseyt, Cambridge By kind permission of the Librarian, the Rev. Dr. Sinker

sound-chest and neck are in one; the vaulted back is hollowed out of one piece of wood, and the flat sound-board, which also covers the neck and does duty for a fingerboard, is glued on to it. These are the characteristics of the rebec and gigue family. There are four strings which pass through the neck near the head, and were in all probability wound round pegs in the back of the head, for the little holes into which these were fixed have been indicated by the artist. This is another Oriental characteristic. The tailpiece has already assumed the tapering form which ultimately developed into the modern tailpiece of the violin. There are two small round sound-holes. The performer is playing the instrument with a bow—the earliest instance of its use in England yet found, I believe—and his left hand is held in readiness to stop the strings.

As we have to rely so much on illustrations in tracing the early history of musical instruments, this one is of very great importance in more than one way, and the question of the name of the instrument will prove of interest a little later. In England this appears to have been the prevailing stringed instrument used with a bow during the middle ages, and we find these same characteristics of the rebec often repeated in instruments of various shapes, of which a few examples are subjoined.

There are many other examples of the rebec to be found in the MSS. of the twelfth, thirteenth and fourteenth centuries of English workmanship.

Fig. 129 represents a singularly well-developed instrument, which also possesses that characteristic of the rebec and gigue tribe—the body and neck in one piece. The drawing is reproduced from an MS., Harleian 2804, dating from the twelfth century. The back of the instrument, which is not visible, was probably vaulted and without ribs, the flat sound-board being glued on to it. There are three strings passed through the head, which is round, and in the back of

which the pegs, if any, were fixed; the sound-holes are semicircular, the bridge has two feet, and the tailpiece, clearly indicated in the drawing, is fastened by a pin to the body. The bow which accompanies the instrument has a knob at each end to which the hair is fastened, and it is quite possible that the

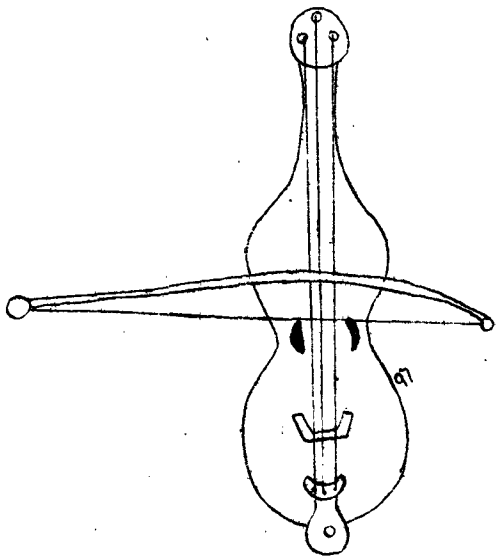


Fig. 129.
British Museum, Harl. MS. 2804. 12th century.

latter was thus tightened at will. This bow compares very favourably with others of the same century.

Fig. 130 shows a cithara in transition, but here the influence of the rebec again makes itself felt, and the track has diverged considerably from the original starting-point, the cithara of the Greeks. In Fig. 130 we have a somewhat curiously shaped body and neck in one; the arms of the cithara have been discarded, and the strings were evidently intended to be stopped against the neck, which

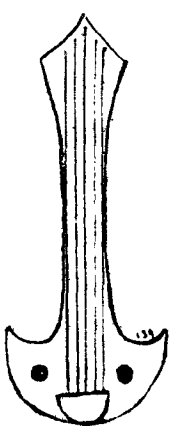


Fig. 130.
Cithara in transition, 12th century. Trin. Coll. Camb. (R. 17, 1).

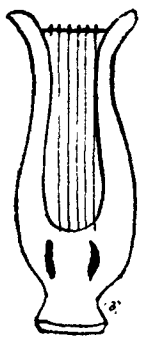


Fig. 131.
Six-stringed lyre, 12th century. Trin. Coll. Camb. (R. 17, 1).

also acts as a fingerboard; we have the small round sound-holes which we so often find in early English instruments, notably in Fig. 128. There are five strings fastened to a tailpiece at one end, and at the other they pass through the end of the neck, which we can hardly call a *head*, since it is but a slight widening of the neck. The drawing is reproduced from a MS. in Trinity College Library, Cambridge (R. 17, 1), and dates from the twelfth century.

Fig. 131 is a six-stringed lyre with sound-holes in the back, but otherwise a very primitive instrument. Fig. 131 is drawn from the same source as the preceding.

Fig. 132 represents a small rebec with four strings, which was common during the middle ages in all countries. It is taken from a Cotton MS., Nero, D., which dates from the thirteenth century. The sound-holes are large and of somewhat uncommon shape, the artist has forgotten the bridge.

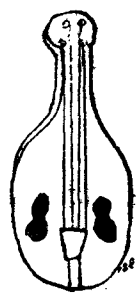


Fig. 132.
Rebec, 13th century. Brit. Mus., Cotton MS., Nero, D. IV.

Fig. 133 represents an instrument which possesses several characteristics of the rebec. It has the vaulted sound-chest and flat sound-board in one piece with the neck, and it is played with a bow. The curved neck finished with a grotesque head indicates an affinity with the instrument which, according to some historians, went by the name of cittern or gittern, but which was plucked with the fingers or the plectrum. There are but two strings, and the artist has indicated a small flat bridge similar to those used at the present day in guitars and mandolines.

Fig. 133.
Rebec, 13th century. Cott. MS. Tib. A vii, Brit. Mus.

With regard to the name of cittern, Carl Engel, in his "Researches into the History of the Violin Family," gives many interesting quotations from poems of the time of Shakespeare, with allusions to the grotesque heads of citterns and gitterns; and Halliwell, in his "Dictionary of Archaic and Provincial Words," gives the term "cittern-headed" with the explanation: "Ugly, in allusion to the grotesque figures with which the cittern was ornamented."

Fig. 133 is taken from a MS. of the thirteenth century, Cotton Tib. A vii. in the British Museum.

Fig. 134 again represents a small rebec, which has a vaulted back and a curved neck, over which the four strings are strained to allow of greater tension; two of the pegs to which the strings are fixed are visible in the side of the neck, which terminates in a decided scroll. The tail-piece also acts as a bridge, and the sound-hole is of the Oriental rose shape. This illustration and Nos. 135, 136 and 138 are taken from a MS. of the fourteenth century, the "Liber Regalis" in Westminster Abbey.

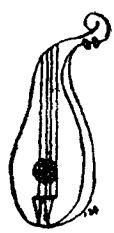


Fig 134. Rebec, 14th century. From the "Liber Regalis," Westminster Abbey.

Fig. 135 shows an instrument very similar to that in Fig. 134, but in this case the neck is not curved, and the four strings pass through holes to the back of the scroll, in which are fixed the pegs; in this specimen the sound-holes are long and slender.

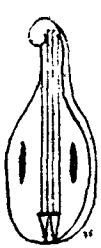


Fig. 135. Rebec, 14th cent. *Ibid.*

The two next illustrations present a great contrast to what has gone before; for we find here a mixed type, which was by no means uncommon in the MSS. of the fourteenth, fifteenth and sixteenth centuries.

Fig. 136 shows an instrument with ribs and a shallow sound-chest, the shape of which recalls the cithara, more especially in the transition forms shown in Fig. 125; but the neck is not added as in

the instruments illustrated in the Utrecht Psalter. The four strings are raised over a bridge, and pass through holes in the head to pegs fixed in the back. This is clearly a compromise between instruments of the cithara or guitar class and the Moorish rebab.

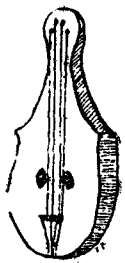


Fig. 136. Instrument of mixed type—cithara-rebec. *Ibid.*

Fig. 137 is given here, although a French instrument of the sixteenth century, to show a step in the evolution of Fig. 136; the similarity in outline is remarkable. The instrument in Fig. 137 has ribs, a long graduated neck, a head with the receding curve associated with the lute family, and the

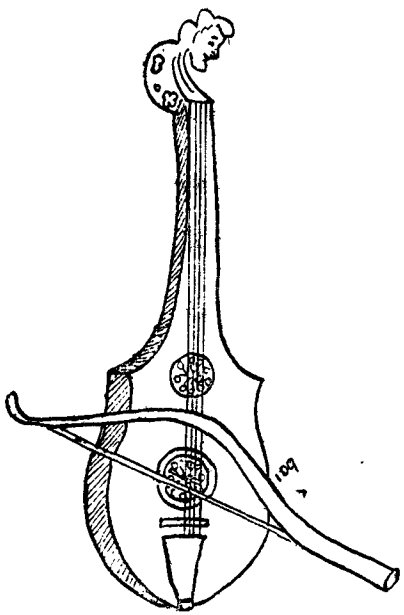


Fig. 137

Instrument of mixed type—cithara-rebec, 16th cent. French MS., "Fonds de la Vallière," No. 4316, Bibl. Imp., Paris.

grotesque of the cittern; the sound-holes are elegant rose-holes; tail-piece and bridge are both present, and the instrument was played with a bow.

In Fig. 138 we have the same characteristics, although the general outline is different. The four corners foreshadowing the viol are already there, but the neck is again, as in the rebec, only a gradual narrowing of the sound-chest.

The bow, which is given with this instrument, was probably common to all the instruments in Figs. 134, 135 and 136 as well.

While the instruments in Figs. 136 and 137 are still in our minds, it will be interesting to note a new and more perfect example (Fig. 139) copied from a French MS. of the fourteenth century in the British Museum—"La Bible Historiaus" (Roy. 17, E VII.) The sound-chest is of the late cithara form already seen in the illustrations from the Utrecht Psalter and in Figs. 136 and 137 with ribs; but here we have the sloping shoulders of the viol supporting a neck finished with a scroll, in which are set the three T-shaped pegs; a finger-board further adds to its affinities with the violin family; no frets are indicated; the sound-holes are C-shaped, turned back to back. A tail-piece to which the three strings are attached is indicated, but there is no bridge. The artist has not drawn a bow with the instrument, but although this particular specimen may have been used without, the guitar-fiddle shown in Fig. 139 has every right to claim a place among the precursors of the violin, and it forms, besides, one of the most valuable evidences that the violin is descended from the ancient cithara of the Greeks.

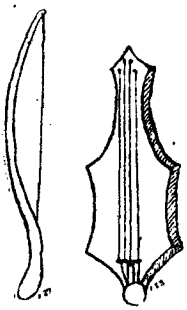


Fig. 138. Guitar-Fiddle, Liber Regalis, Westminster Abbey. 14th cent.

Fig. 139. Guitar-fiddle, 14th century, Roy. MS. 17 E VII., Brit. Mus.

The instrument in Fig. 140 shows a fiddle with slight incurvations, played with a small bow; the neck, which again finishes

with a scroll, is of a separate piece, but the artist who appears to have been somewhat erratic, has not indicated any fingerboard; he has, however, given the fiddle two bridges: one small straight one, such as are used now on guitars, and a high arched one, suitable for a bowed instrument; there are three strings, and the sound-holes are in an unusual position near the tailpiece, probably another freak of the artist.

Fig. 140.
Fiddle, 14th cent., Italian work. Add. MS. 29902, Brit. Mus.

The MS. from which Fig. 140 is copied is in the British Museum (Add. MS. 29902), and consists of miniatures and borders cut out of Italian choral works of the fourteenth century, and pasted into a book without the text.

This example (Fig. 141) is exceedingly interesting for many reasons; it is Flemish, and has been copied from a MS. which contains many musical instruments not yet included in musical histories, and particularly valuable from the fact that the names in most cases accompany the instruments.

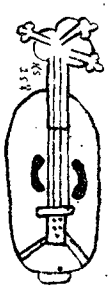


Fig. 141.
"Viola," 14th cent. Sloane MS. 3983, Brit. Mus.

The MS. (Sloane, 3983 Brit. Mus.) is a Treatise on Astronomy, translated from the Persian of Albumazar into Latin by Georgius Zothari Zopari Fenduli, priest and philosopher, with a prologue and numerous illustrations by his own hand. I have chosen this fiddle among the many, because it is a good illustration of the oval vielle of the twelfth, thirteenth and fourteenth centuries, and because the name "viola" is written in the MS. just above it. The fingerboard, the trefoil head containing the three pegs, the bridge apparently joining the tailpiece, which is fastened by loops to a large tail-pin, and the large "C" sound-holes facing each other, are all clearly represented.

Fig. 142, taken from an English MS. (Arundel 157) of the thirteenth century, represents a type of instrument common in Europe during the twelfth, thirteenth and fourteenth centuries, which is an offshoot of the rebec; it has a vaulted back, as may be seen from a specimen of the twelfth century given by Willemin, and taken from a MS. in the Bibliothèque Impériale, Paris (see "Monuments Inédits"), in which part of the side of the instrument is shown. The body and neck are in one; there are two rose sound-holes, one in the centre of each lobe, and three strings fastened to a tailpiece and passing through holes in the large round head, presumably to the pegs on the other side, according to Oriental fashion; the bow used with the instrument has a long handle, which must have been very much in the way of the performer; fortunately, the orchestras of the thirteenth century were not very crowded and every member could be allowed plenty of elbow room.

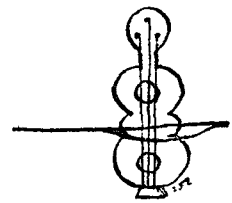


Fig. 142.
Instrument of the rebec or gigue tribe, 13th cent. Arundel MS. 157, Brit. Mus.

These examples might be continued *ad infinitum* did space but allow, so rich are the illuminated MSS. of our own, and other, museums in examples of stringed instruments as yet unpublished; but these will suffice to show that no matter how many and various the instruments appear to be in general outline, they all were evolved from the tanbur—the rebab with vaulted back, or the cithara with ribs and shallow sound-chest. The shape of these stringed instruments has been empirically determined, and varied so constantly in outline and detail according to time and place, and the whim of the maker, that attempts to classify them by any but the two broad classes described above on p. 235 seem futile: as soon as a new development was thought out by some master-mind, or introduced from the East, it appears to have been seized upon immediately by in-

strument makers generally, and applied indiscriminately to existing models. Throughout the middle ages this uncertainty as to models and this spirit of progression are very noticeable.

After carefully examining examples of stringed instruments from various countries during the middle ages, we cannot fail to notice the prevalence of the rebec tribe until about the twelfth century; this is equivalent to acknowledging the influence of the Moors on the bowed instruments of Europe, since it has long been an accepted fact among musical historians that the rebec was evolved from the Moorish rebab in the first instance. But how and when? What bearing has this Moorish influence on the precursors of the violin? And was the Moorish rebab the first bowed instrument known in Europe? Those are the questions which we must be prepared to answer. The Moorish rebab has been much written about, but as no description of the instrument with an illustration anterior to the conquest of Spain is known to exist, writers, therefore, hold conflicting opinions on the subject. The oldest description known is that of Al-Farabi, the famous Arabian musician, who flourished at the beginning of the tenth century; he assigns to it two strings, but has not given a drawing of the rebab—the MS. is in the library of the Escorial, Madrid. Our safest course is surely under the circumstances to examine the instruments at present in use under that name among the Arab races and to compare them with the various examples of the Middle Ages.

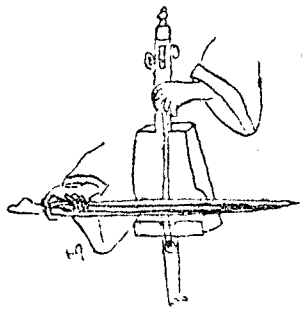


Fig. 143.
Rebab-esh-shaer, modern Egyptian.

The rebab-esh-shaer, or poet's rebab (Fig. 143), is often quoted, and notably by Fétis, as the progenitor of the rebec, but this hypothesis seems hardly tenable when we consider that the shape and construction of the body are entirely different from those of the rebec; and the rebab-esh-shaer is

held like the violoncello and not like the rebec; nor have we any proofs of the antiquity of the instrument, which has already been described, and which may be seen in the collection of musical instruments at the South Kensington Museum.

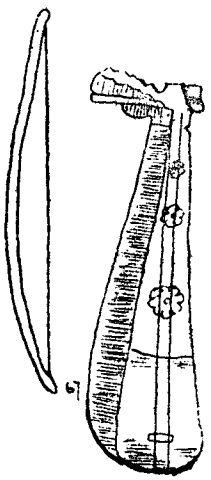


Fig 144.
Modern Moorish rebab. (Vidal).

Fig. 144 represents another rebab in use at the present day in Persia and among the Arabs; it is boat-shaped, and the sound-chests consists of a vaulted back hollowed out of one solid block of wood, to which has been glued a parchment or thin wooden sound-board; the instrument tapers off at the head without having any neck; the pegs are either set in the back or the side of the head, as in the present example, and the head is bent back at right angles to the body; the strings vary in different specimens from one to three. Comparison with the Byzantine rebab in the Kentrikon Museum, Athens and others dating from the earliest centuries of our era (see notes pp. 406-409) and Appendix. *Rebab*) removes all difficulty in establishing its antiquity.

In the instruments (probably barbitons*) depicted on the sarcophagus found at Agrigente in Sicily, to which reference has several times been made, and of which a cast may be seen in the Sepulchral Basement of the British Museum, we find that this boat-shaped sound-chest was known before our era, and that its shape has remained practically the same throughout the nineteen centuries or more; how long it had been known previously we cannot even conjecture, but the shape of the sound-chest is very similar to that of the nangas or primitive harp-like instruments of the ancient Egyptians (see Fig. 100), and the latter probably supplied the model. The Agrigente instruments are the

* See Appendix. *Barbiton.*

same as the one shown in Fig. 108 held by a female figure standing on Achilles' left in the bas-relief representing scenes from the hero's life at Scyros, which has been assigned by experts to the second century A.D. Fig. 108 is a reproduction of a photograph taken for this work through the kindness of M. de Villefosse, from part of the bas-relief in the Louvre.

From the cast in the British Museum the boat-like shape of the sound-chest is distinctly visible from the side. The instrument is clearly a precursor of the rebab as we know it, but provided with many strings like the lyre, which accounts for its being a little wider than the modern instrument with but two or three strings. Two other representations of the same instrument exist, embracing on the whole a period of three or four centuries; this seems to indicate that among certain races at least it was a well-known instrument and one in general use; we must also notice that during those four centuries no further development is traceable. Mr. Carl Engel believes the Agrigente Sarcophagus to show traces of Semitic influence, and he points out that the hypothesis is a reasonable one, since Agrigente was in possession of the Carthaginians before 250 B.C., the date assigned to the Sarcophagus.

The early rebecs are of two distinct types: the one outline is pear-shaped with a neck like the instrument shown by Gerbert (see Fig. 41) called the Lyra Teutonica, which he says he copied from a MS. of the ninth century—this has affinities with some of the ancient Egyptian nefers or tambouras; the second type is boat-shaped like the modern rebab in Fig. 144. There are several fine examples of the latter in the Cantigas di Santa Maria.

It may be interesting at this juncture to recapitulate very briefly the chief points in the history of the Moors which bear on this period in the development of the stringed instruments of Europe. In the sixth century the Arabs conquered Persia, and from their own records we read that, finding the musical

system of the Persians so far in advance of their own, they adopted it, making a profound study of it with native teachers. The Arabs declare that it was from the Persians* they obtained the rebab, and probably the fiddle-bow at the same time, but this is not stated, yet the Arab name for the bow is derived from the Persian. The Arabs turning westward conquered Northern Egypt, destroying Alexandria, and with it the splendid library and its untold treasures. In 711 Tarik made the first attempt to subjugate Spain at the battle of Xeres. The conquest was completed by Abd-er-Rahman in 731; he then pushed north into France, reaching the Loire, where he was defeated at Tours in 732 by Charles Martel. After this there was a short peace, during which the Carlovingians did not scorn to learn much from their enemies. In this way the superior culture of the Saracens gave a fresh impetus to art, which had been languishing and dying a slow death in Europe since the fall of the great Roman Empire.

Charlemagne, who fought many battles against the Moors in Spain, being the most enlightened and understanding sovereign of his and many succeeding ages, learnt much about the liberal arts from them. When Charlemagne, during the years of peace, gathered round him at court the flower of intellectual Europe, music was not unrepresented. From the three schools of music which he founded at Metz, Soissons and St. Gall, emanated teachers who spread the culture of the art in other lands, where, however, we have good reason to think it had not been entirely neglected, for the following reason: Another great tide of Eastern influence, emanating from the Greeks of Northern Africa and of Asia Minor, had, I feel convinced, preceded that of the Moors; for the instruments of a totally different type that we find growing up side by side with the descendants

* A statement which receives confirmation just as these lines are passing through the press. See Pl. X., XI., XII., p. 407 and 408 and Appendix. *Persian Rebab.*

of the rebab, and of which the citharas in transition shown in the illustrations from the Utrecht Psalter were the prototypes, point to that conclusion.

If proof were wanting of how much Charlemagne was influenced by the music and musical instruments of the Moors, and of the manner in which the latter were introduced from Spain into the surrounding countries, it would be found in Carlovingian MSS., from one of which is drawn the next illustration (Fig. 145), taken from a MS. of the end of the eighth century, "L'Evangéliaire de S. Médard de Soissons," which was written for the Emperor Charlemagne, and was presented by his son, Louis le Débonnaire, to the Abbey of St. Médard at Soissons, one of the very towns in which a school of music had been established by him. I have not seen the MS. itself, which has within the last few years been transferred to the Bibliothèque Nationale in Paris. But finding two independent reproductions of the folio of the MS. containing Fig. 145 in which the instrument was altogether different—the one given by M. Edouard Fleury having incurvations like those of a modern guitar—I applied to M. Michel Deprez, the curator of the MSS. department, who very kindly compared my little sketches with the original in the MS., and wrote me that the one reproduced in Fig. 145 was correct as to the instrument. This rough illustration was copied from the beautiful work of Count Auguste de Bastard on the illuminated MSS. of France, of which a very large number of examples are reproduced in facsimile. The outlines, after being drawn by the artist, were printed, and the colours were afterwards added by hand in each of the only five copies of the work that exist. One of these is in the British Museum. The work that was begun on such a magnificent

Fig. 145.
Stringed instrument (tambourá), end of the 8th century, from the "Evangéliaire de S. Médard," in the Bibl. Nat., Paris. (See Bastard).

scale, and which has been accomplished with the most scrupulous care and accuracy under the immediate supervision of the Count, has unfortunately remained unfinished.

One glance at the instrument held by the Saint (there are several others in the MS. holding similar instruments) is sufficient to determine its origin; it is the descendant of the oval Egyptian nefer or of the tamboura, of which there are so many examples on the wall paintings of Egypt. The instrument is painted in gold in the MS., and the outline only is indicated, without reference to such details as bridge, tailpiece, fingerboard or sound-holes. We know that it had three strings from the three pegs in the head, which are arranged in precisely the same manner as in the instrument held by King David in Fig. 122 from the Utrecht Psalter. There are no bows in any of the illuminations of the "Evangéliaire de S. Médard," which, of course, does not prove that it was not known at the time; when we find the instrument again in the thirteenth century in both Arab and Spanish forms in the Cantigas de Santa Maria, the tamboura is still twanged with the fingers. Fig. 145 is, I believe, the earliest example of the mediæval instrument that has yet been reproduced in any musical work. Fig. 146 represents an Egyptian nefer of the oval type. The reader is invited to compare Figs. 145 and 146, the similarity in the outline of the

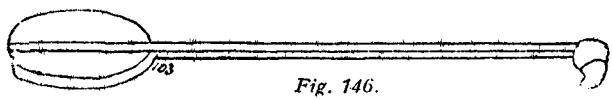


Fig. 146.

Egyptian nefer, from the 52nd tomb at Thebes—Kourna (Champollion).

two instruments will at once be apparent; but in Fig. 25 the resemblance is still more striking. An example of the vaulted tamboura* on an early Christian funereal relief, preserved in the Museum at Arles, is given on Pl. II.

* An ancient Assyrian tambur, given in Rawlinson's "The Five Great Monarchies," 1871, Vol I. p. 534, gives some indication of the manner in which the instrument reached the Persians and through them the Moors. See also notes pp. 407 and 408.

With regard to the instruments introduced by the Arabs into Europe, one comes across them occasionally unchanged in outline and general characteristics after centuries have elapsed; whereas in other cases the instrument, falling into the hands of an enterprising race, is soon assimilated to the forms best known and most liked, and it speedily becomes a hybrid.

Continuing to examine the evidences of the form of the Moorish rebab which we have shown in Fig. 144 and in Pl. XII., at the two extremes of its existence as known to us, we shall be able to form some opinion as to the probable outline of the actual instrument introduced by the Moors.

It will be remembered that we found at the beginning of this chapter two distinct types among the rebecs of the Middle Ages, the pear-shaped, as in the oft-quoted Lyra Teutonica of Gerbert, and the narrow boat-shaped rebec like the modern Moorish rebab (Fig. 144).

Our next illustration (Fig. 149) represents another rebab of the tenth century, taken from the Psalterium of Labeo Notker, containing his translation of the Psalms into German. The instrument in Fig. 149 is given by Hyacinth Abele in his little work on the violin, "Die Violine, ihre Geschichte und Bau"; it forms part in the MS. of the usual Psalterium group of King David playing upon whatever instrument was at the time known as the cithara (the instrument which in our version is translated harp), accompanied by other musicians, of which two are usually intended to represent Ethan and Jeduthun. This celebrated Psalterium was, until the seventeenth century, in the library at Einsiedeln, but was in the middle of the century restored to St. Gallen, where it had been written and where it is now. The illustrations of the Psalter are drawn in brown and red ink, and are very sparingly ornamented with gold.

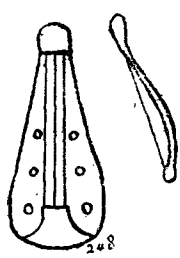


Fig. 149.
Rebab, 10th cent. from Labeo Notker's German version of the Psalms. Libr. St. Gallen. H. Abele.

This rebab, coming as it does from St. Gallen, where Notker lived and worked, is another specimen in which direct Moorish influence is traceable, not only through the music school there established by Charlemagne, but also because the Moors themselves penetrated thus far.

The instrument itself is very significant, for it stands midway between the rebab and the rebec. This pear-shaped instrument is clearly a descendant of those on the Sassanian silver dish (Pl. XI.) and others referred to in notes p. 407 and 8, the main difference being the degree of prolongation of the body and the presence or absence of a bow.

This Labeo Notker, to whom we owe many precious musical relics, must not be confounded with Notker Balbulus, the musical monk of St. Gallen, who flourished a whole century before (830-912).

Labeo Notker, a nephew of Ekkehard I., belonged to the same monastery as his namesake; he was born about the middle of the tenth century, and died in 1022. His learning and zeal brought him at an early age to a position of honour at the head of the school; some corrections by his own hand in a Latin poem by one of his pupils are extant. He translated many of the classics into German to assist the students. His translation of the Psalms into German, a language he tried his best to popularize, is a valuable work which has been published in Hattemer's "Denkmale des Mittelalters" (Vol. II. St. Gallen, 1846). The translation is especially interesting to musical antiquarians, for not only does it inform us of the German equivalents of the names of musical instruments, but in it Labeo Notker has frequently explained the nature of the instrument itself mentioned in the text. This knowledge and interest shown in music are not surprising, for he has left a little Treatise on Music, the very earliest in the German language.

Before proceeding with our investigations into the evolution of the rebab, it will be well to give an illustration (Fig. 150) of

Plate X.

MUSICIANS AND DANCERS. FROM A FRIEZE FROM YUSUFZAI (AFGHANISTAN).
(In the British Museum).

a rebec alleged by Herbé in his "Costumes Français" to be of *the eighth century*. He places it without further explanation as to its origin, on a page devoted to implements, ornaments, &c., of the time of Charlemagne. Although the authority is so uncertain, I give the illustration for what it is worth, because, judging from the foregoing examples, there is no reason why the instrument should not have been known in the eighth or ninth century. On comparing it with Figs. 132 and 135 of the thirteenth and fourteenth centuries, a great resemblance in the outlines will be seen. Compared, however, with the Lyra Teutonica given by Gerbert (Fig. 41), the outline of the latter is seen to be pear-shaped, the greatest diameter being at the tail end instead of in the centre, as in Fig. 150; Fig. 41 shows higher development, having a distinct finger-board. Fig. 150 has four strings; the tailpiece is semi-circular, very small, and is fastened by a loop to a button on the back, which is not visible in the drawing. There are six sound-holes, three on each side, as in Fig. 149, although they are differently grouped; the bow, if the date assigned be correct, is the earliest yet found in Europe, and is very similar to that of Labeo Notker's rebab.

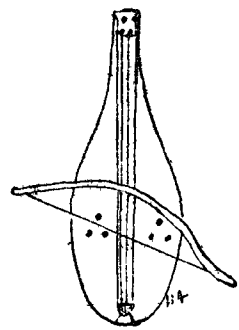


Fig. 150.

Rebec, 8th cent. Herbé, "Costumes Français."

While we are still occupied with the past greatness of the monastery of St. Gallen, there is a very fine Psalterium of the ninth century that is worthy of a little attention if only on account of the musical instruments to be seen therein. The MS. goes by the title of "Psalterium Aureum," on account of the lavish display of gold in the miniatures and initials. The author of the MS. is in this case not known; a latter MS. attributes it to Folchardus (ninth century), but the dissimilarity of the styles weighs heavily against this hypothesis. The artist who painted the miniatures of the "Psal-

terium Aureum" had evidently felt the influence of Irish art. It was, it must not be forgotten, Irish missionaries of the seventh century, Columba and Gallus, who, in their wanderings through Switzerland, overthrew the altars to Wotan, and founded many monasteries, Gallus giving his name to the one we are just now interested in.

The miniatures of the "Psalterium Aureum" have been very perfectly reproduced in a fine work on the subject by J. Rud. Rahn, St. Gall., 1878; these miniatures are far more artistic than the early age of the MS. would lead us to expect. There are several full-page paintings on purple grounds, and the initials are large and very elaborate.

In a communication on the subject of the MS. (Cod. MS. 22), which was kindly sent me by the librarian of the *Stiftbibliothek*, St. Gallen, Dr. R. Füh, I find that the instruments, of which I give one in Fig. 151, are quite correctly drawn, and that the irregularities in the outline are likewise noticeable in the miniature.

Fig 151.
Pandura, or tambura, 9th cent., from the "Psalterium Aureum" (Codex 22). St. Gallen.

Fig. 151 is part of a full-page miniature representing two Levites placing the ark before King David, perhaps an allusion to 1 Chron. xvi. 1 and 7. King David, seen in Fig. 151, is holding in his left hand an instrument which in the present sketch seems to be intended for a pandoura* similar to the one reproduced in Fig. 25; the drawing is unfortunately vague. The instrument given in Figs. 24 and 108 had 8 or 9 strings; it

* See also Garrucci "Museo Lateranense." Tab. XXX. and "Storia," Vol. V., pl. 35 No 39.

Plate XI.

Sassanian Silver Dish. British Museum. Showing Performers on a pear-shaped stringed instrument akin to Rebab and Lute and on a curved Horn.

does not seem to have enjoyed great popularity in that form in Europe, whereas the pandoura reappears in many forms and has survived in the lute. The instrument in Fig. 151 had evidently three strings, although but two are drawn, for there are three holes indicated in the head. The pandura, we hear from the Treatise on Music written by Al-Farabi, the famous Arabian musician who flourished in 900 A.D., and of whose work a collated edition, Arabic and Latin, has been published by Kosegarten, had sometimes two, sometimes three strings; it was a very old instrument also called tanbur.

From the foregoing examples it will be seen that by analogy with the modern rebab of the Arabs and the ancient rebab of the Persians we are enabled to arrive at a conclusion as to the nature of the instrument introduced under that name into Spain by the Moors in the eighth century, a conclusion which may be granted as justifiable. In this instance the Arab and European races stand out in strong contrast. The Arabs were in possession of instruments such as the rebab and tambura in the seventh century—the latter an instrument found depicted on Egyptian wall paintings and tombs of highest antiquity, the former probably of less remote origin—and the same instruments are found practically unchanged at the present day among the descendants of those Arabs, who have been little if at all influenced by Western civilization; yet, for certain, *nine* centuries, and probably *twelve* have elapsed since the earliest date at which we can feel certain that the rebab and tambura were known to them.

The Arabs themselves have declared that they obtained the rebab from the Persians in the seventh century, but we only know of the instrument with any degree of certainty from Al-Farabi's description (tenth century).*

What happened to those instruments after they had been made

* See note p. 398.

known to the nations of Europe? What remains of the rebab at the present day? and to what extent is the violin indebted to the instrument in its evolution? These are the questions which must be answered before we bring our chapter to a close.

We have seen that already in the tenth century the shape of the rebab in Notker's Psalterium (Fig. 149) shows a step forward; in Gerbert's Lyra Teutonica and in instruments of the type of Fig. 150 (which, it must not be forgotten, may be of a later date than the eighth century assigned by Herbé) still further developments are noticeable. By the time we reach the eleventh and twelfth centuries the rebec, as the instrument was later called, was to be found in innumerable guises, retaining its characteristics of vaulted back and of having no separate neck or fingerboard, but being otherwise grafted on to other types and nearly always played with the bow.

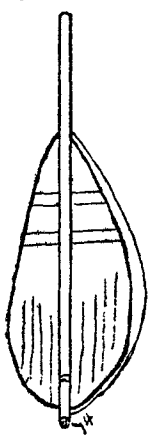


Fig. 101.

Tambura discovered by Mr. Maddox at Thebes. See Sir Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians." Vol. I., p. 483.

I am inclined to think that the instrument we call rebab, with the pear-shaped body, is a hybrid which originally obtained its outline from the pear-shaped tambura, known to the ancient Egyptians (see Fig. 101), which is quite distinct from the oval nefer given in Fig. 146, and also from the spoon-shaped with two or four lateral pegs which so constantly recurs in hieroglyphics. Fig. 101 represents the instrument discovered by Mr. Maddox in a tomb at Thebes; the body is of wood and the sound-board covered with leather.

This pear-shaped tambura was no doubt in use among the Moors who conquered Spain, as well as the oval type which we found in the Evangéliaire de S. Médard (Fig. 145) together with many others, since Al-Farabi, who flourished in the ninth and tenth centuries,

mentions several panduras (or tamburas) of which the Chorassan and Bagdad varieties are respectively of Persian and Assyrian origin. As far as I have yet discovered from the Latin translation given by Kosegarten of the treatise of this learned Arabian musician, no clue is given as to the form of the instruments.

A group of interesting and valuable examples discovered just as this chapter was in the press, throws light on the early history of the rebab and tanbur. The ancient Persian boat-shaped rebab (cir. 800 B.C.), twanged with the fingers is shown on some terra-cotta figures found in a Tell at Suza (see Pl. XII.) Comparison with the rebabs in Figs. 15, 144, 149, 153 and 4, etc., leaves no doubt as to the origin of the mediæval instrument. Two silver dishes, Persian *repoussé* work (between the 4th and 7th cent.) show examples of the pear-shaped rebab. The first of these, at the British Museum,* is given on Pl. XI. (see p. 380). The second silver dish is among the collections at the Hermitage, St. Petersburg;† it was found at Irbit in 1880. The subject is Eros riding on a lion, a purely Greek conception, showing that the Persians of that period took their inspiration from Græco-Roman art, bringing it into harmony with Persian thoughts and customs. The three strings of the rebab are strained over the neck, as in Fig. 134; the neck is bent back at right angles to the body, and the pegs are inserted in the back. A third example, on which is depicted a similar instrument, was found at Perm, and forms part of Count Stroganoff's collection.‡

The instruments from the Topes at Jumal-Garhi (see Pl. X. and p. 163) date from the days of Greek classical influence in

* For an account of the dish accompanied by an illustration, See "The Treasures of the Oxus," by O. M. Dalton, 1905, p. 190.

† For an illustration see "Comptes-Rendus de la Comm, Imp. d'Archéologie," pour l'année 1881. St. Petersburg, 1883; text p. 52 and Atlas of the same date, Pl. II., No 10.

‡ See "Antiquities du Nord" by J. R. Aspelin, p. 141, No. 608.

Afghanistan and would doubtless account for the introduction of rebabs and tanburs into S.E. Europe through the medium of the Greeks of Asia Minor. Sculptures from the Buddhist Tope of Amarâvati, dating from the latter part of the second century A.D., on the grand staircase at the British Museum (slab. No. 17) provides a back view of a very large stringed instrument of somewhat different type and an outline reminiscent of the large viols, held horizontally. Other musicians are playing on a transverse flute and a drum (see Jas. Fergusson, "Tree and Serpent Worship." London, 1873, Pl. LX., No. 2). The Kentrikon Museum* at Athens possesses another example of the rebab on a Byzantine relief, on which is depicted a Centaur holding the instrument, a piece of very coarse workmanship.

The culminating point of interest in this group is undoubtedly the pear-shaped rebab played with a bow on one of the sides of an ivory casket of Italo-Byzantine work belonging to the same period as the Veroli casket of the S. K. M., about the 8th or 9th cent. A.D., the specimen in question forms part of the Carrand Collection,† Florence, in the Palazzo del Potestà. The bow, which is long and slender, shows a higher development, than the examples derived from the Carlovingian MSS.

Equally interesting examples of the tanbur have simultaneously come to light, which allow us to trace the progress of the instrument from Egypt, through Assyria,‡

* For an illustration of this relief see "Das Byz. Relief aus Tusla im Berliner Museum," by J. Strzygowski. Jahrb. d. K. Preuss, Kunstsammlungen, Berlin, 1895. Bd. XIX, p. 62.

† For an illustration with text, see Gallerie Naz. Ital. III. (1897), p. 263; by A. Venturi, and "L'Arte," Vol. I. (1898), p. 24; Museo Naz. Firenz, (1898), p. 205, No 26 (text only).

‡ See Rawlinson "The Five Great Monarchies," 1871, Vol. I., p. 524; also Brit. Museum, Assyrian and Babylonian Room, Mural Case, No 39; small terra cotta idol. Bust of female musician; neck of instrument only remaining; left hand stopping strings; probable date about 2nd cent. B.C. to 1st cent. A.D.

Greece* and Carthage,† thus again pointing to a double introduction into Europe from East and West.

Evidence of the prevalence of the tanbur in Europe during the Græco-Roman period (2nd or 3rd cent. A.D.), is afforded in abundance‡ by a group of instruments similar to that in Fig. 25.

Fig. 152. Rebec, 13th cent., Lansd. MS. 420, Brit. Mus.

Fig. 152 is of a well-known type, taken from an English Psalter of the thirteenth century, with four strings, (although the artist has indicated but two), judging from the diamond-shaped head, which contains four pegs.

I feel convinced that if we could but obtain a glimpse of the treasures secreted in old Spanish monasteries at the present day, as well as in the various libraries, public and private, a curious light would be thrown upon the history of music and musical instruments during the early Middle Ages; and that rare illuminated MSS. would be brought to light that would in a measure account for the treasures contained in the "Cantigas de Santa Maria," a MS. of the thirteenth century, of which

* The Greek Pandura, of which we read in the classics occurs on a bas-relief from Mantinea. See Bull. de corresp. hellénique. Paris, 1888, Vol. XII., Pl. III. and text by Gustave Fougères, p. 105-128 (whose theories as to date must be accepted with reserve).

† The Carthage Tambura occurs in the hands of a terra-cotta figure dating from the period of the Roman domination. See Musée Lavigerie de St. Louis de Carthage. Coll. des Pères-Blancs, formeé par le R. Père Delattre. Paris 1899. Part II., Roman Period, Pl. XIII., No. 7. Text p. 51.

‡ Roman Sarcophagus, Fulvio Orsini, see Montfaucon, L'Antiquité Expl. Tom. III., Pl. 57, and Revue Archeól. Tom. III., Pl. 359.

Sarcophagus Giustiniani Coll. See Gall. Giustiniani. Tom. II. Tav. 91. Montfaucon, op cit., Suppl., Tom. III., Pl. 27.

Two Sarcophagi in the Luteran Museum, see note to p. 404.

For fuller references consult "Compte. Rendu de la Comm. Imp. Archéol." (St. Petersburg) for the year 1881. Published 1883. Article by Ludolf Stephani (in German), pp. 52 et. seq.

much has already been said in these pages. A country which could in illustration of a set of canticles dedicated to the Virgin find in the thirteenth century fifty-one figures of instrumentalists nearly all carrying different instruments must have been a very musical one. Almost every class of instrument is therein represented (the drum only by the small tabor). I have not yet come across any manuscript which contains so many. The greatest proportion of these can of course be traced to an Oriental origin, through the Arabs, and it would be a matter of the greatest importance to find evidence of the earlier specimens before they reached this stage of development; and such probably do exist if one could but find them! The suggestion that most of the instruments are of Moorish origin must not be taken to mean that they remained strictly true to this origin without feeling outside influences, for Spain was not peopled entirely by the Moors, and the constant effort of the Christians to regain portions of the lost territory ever and anon brought a fresh European, chiefly French, tide to bear on the civilization, which prevented the Moorish element from predominating entirely. More especially was this French influence on the Fine Arts of Spain noticeable during the eleventh and twelfth centuries; neither music nor musical instruments escaped it. As the MS. "Cantigas" is a product of the thirteenth century, this explains the meaning of much that was foreign to Moorish and Mozarabic art and costumes in the musicians represented therein. After Toledo had been wrested from the Moors in 1085 by Alphonso VI. of Castile and Leon, the Roman breviary was introduced into the worship of the Christian Church, the ground having been previously paved by the influx of French monks, chiefly from Cluny, who settled in Spain, and to whom the highest ecclesiastical posts were given. The Gregorian chant only was commanded to be used in the churches. Of course this change was not effected without a severe struggle, for the people were accustomed to the Mozar-

Plate XII.

THE REBAB AND PANDUR OF THE ANCIENT PERSIANS. VIIIth CENTURY B.C. FROM THE TELL AT SUZA.

Reproduced by Courtesy of M. Ernest Leroux from "Délégation en Perse."

by J. de Morgan. Paris, 1900. Vol. I., Pl. 8.

From a Heliogravure by M. Paul Dujardin.

abic ritual, and would not see it supplanted by the Roman. Indeed, its hold upon the people was so strong that to this day there exists in Toledo Cathedral a chapel where the Mozarabic service is performed daily by clergy and musicians devoted exclusively to it; the ritual is the same as in the Middle Ages and has been derived from old MSS. (See "Notes on Early Spanish Music," by Juan F. Riaño, p. 6).

Fig. 153.
Boat-shaped cittern or rebab, 13th cent., "Cantigas de Santa Maria."

The figures of the musicians in the "Cantigas" illuminations appear to have been drawn from the life, judging from the unusual amount of expression with which the artist has endowed them. The collection was, however, I should say, not intended to be exhaustive, but merely illustrative of the principal instruments used at various times, not in concert, to accompany the songs to the Virgin.

Fig. 153 represents one of these figures tuning her instrument. Her companion, who holds one of a similar kind, is giving her the note, while an exalted personage, seated on a small throne, probably some troubadour or musician of high degree, looks down upon them with a slightly supercilious smile; he is playing upon a four-stringed vielle or fiddle. The instrument in Fig. 153 is, it will be seen, derived from the boat-shaped rebab, and has three strings and a tail-piece acting as a bridge, and two sound-holes, probably intended to be crescent-shaped. There is, however, an important divergence about the specimen; its strings were plucked instead of vibrated by the bow, as we learn from the accompanying monk, who holds an instrument of the same pattern and is plucking the string with a quill to give the note. The head,

which is very indistinct owing to the darkness of the colouring, is probably curved back; this is, in fact, the cittern or gittern so often mentioned in Chaucer and other poets of the Middle Ages, which had nothing more in common with the cithara or guitara than the derivation of the name and the fact that the strings were plucked. If other evidence were required in proof of this suggestion, it would be found in the position in which the monk holds the instrument, viz., horizontally, stopping the strings with the left hand and plucking them with the right.

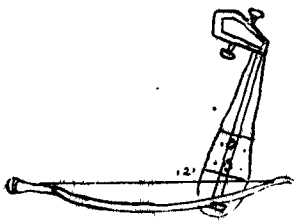


Fig. 154.

Gigue, 13th cent., "Cantigas de Santa Maria."

Fig. 154 represents a gigue or improved rebec, derived from the true rebab and innocent of any great structural changes. There is in the miniature a fingerboard coloured darker than the rest of the body, the body is boat-shaped. There are two small round sound-holes on each side, two small roses under the strings, and two strings attached to a combined bridge and tailpiece. The head, thoroughly Oriental in character, is bent back like that of the lutes, the strings being strained over the edge or nut, and passing through holes to the back, where are the two pegs. The remarkable circumstance about these boat-shaped rebecs played with the bow is that they are held as in the very first specimen we have (Fig. 24) of the beginning of our era, with the head uppermost slanting towards the left shoulder, and the tail end resting on the performer's knee; whereas the pear-shaped instrument which has been included under the name of rebec or gigue is invariably held in the violin position. Several other instruments like that in Fig. 154, varying a little in size and detail, but bowed and held in the same position, are given in the MS. Want of space forbids the reproduction of them all; they can, how-

ever, be seen in black and white in Riaño's book, as before stated. The boat-shaped instruments seen in Figs. 155 and 156, the one with three strings and the other with six, are like Fig. 153, citterns, having a decided neck, although still in one piece with the back, curved backwards and finished with a grotesque head; the sound-holes are in both cases rose-shaped. These two examples are of the fourteenth century.

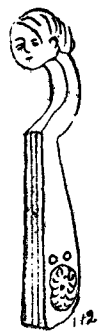


Fig. 155.
Boat-shaped cittern, 14th cent., from "Bibles historiaux" in the Bibl. Nat., Paris (Willemin).

Fig. 156.
Boat-shaped ciftern, 14th cent., MS. 17 E. VII., Brit. Mus.

Doubtless many more illustrations of the boat-shaped rebab of the middle ages might be given to prove that the species did not die out after the European nations had experimentalized with the shape of the original Moorish rebab, but these will suffice for the purpose of this chapter.

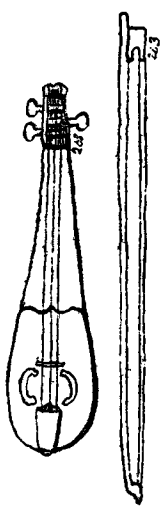


Fig. 157.
Geige of the 15th and 16th cent., from a fac-simile in the Galpin Collection.

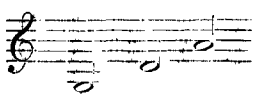
Fig. 157 represents an instrument of the fifteenth and sixteenth centuries which has undergone considerable development; it has a modern and, above all, a European look which none of the other specimens had in the same degree. This geige most resembles the instrument in the Cantigas (Fig. 154) except for the head, which here is finished with a scroll and contains a peg-box such as we see in violins.

The origin of the illustration requires a little explanation: it is reproduced from an instrument in the fine collection of the Rev. F. W. Galpin, of Hatfield, Broad Oak, Essex, who very kindly photographed it in a group

with some others for these studies, and Fig. 157 is a drawing made from the photograph.

The instrument itself is of great interest, although it is but a facsimile made by Mr. Galpin from the illustration in Sebastian Virdung's "Musica Getutscht" (published at Basel in 1511). This geige is used in the Pastoral Plays which the Vicar arranges with members of his parish for the May festivals. The idea seems a singularly happy one, and we should not probably find many villages in England where associations with the past are so faithfully kept up and old customs revived. The plays are performed in costumes of the time, and the morris and other old English dances and rounds are danced on the green in this quaint, old world village—or rather town—to the music of the rebec. Part-songs are sung to the accompaniment of the portative organ or Bible regal, and processions march to the more vigorous music of the old sackbut and wooden cornet, as in the days of Henry the Eighth, who had ten sackbuts in his band.

The geige, or improved rebec in question, is tuned to G D A,



and the tone of the instrument, although rather shrill, is by no means unpleasant, it is, moreover, eminently suitable for outdoor music. There are both bass bar and soundpost in this specimen. The back and neck are in one piece, hollowed out of a block of wood with a flat sound-board glued on; the wide finger-board following the outline of the body is added. The instrument, of course, nearly approaches the pear-shape, although very much elongated in proportion to the width, a characteristic of the Moorish rebab of the present day; the tail end of the instrument has no longer the greatest diameter, as was the case in Notker's (Fig. 149), and in the modern rebab. The bridge is arched and the tailpiece is wedge-shaped; the

sound-holes in the form of "C's," or crescents, as they are also sometimes called, face.

The word *Geige*, which in modern German is a violin, is at least some 300 years older, as far as we can trace it, than Virdung's illustration, but the latter is the first instance I have found of the word accompanied by an illustration; and on this we base our definition of the instrument—an improved rebec with a finger-board. The name is in Virdung applied with the qualification of *klein* (small) to the specimen in Fig. 157, and with that of *gross* (large) to an instrument of a totally different type with decided and very deep incurvations, ribs, a head bent back as in the lute; there are nine strings, a large rose sound-hole and two small "C" holes in the foliate parts of the body which correspond to the shoulders of the violin. We also find frets and a bow, but no raised or arched bridge has been indicated, only a level or guitar bridge and tail-piece which must have had a raised edge over which the strings were strained. The *klein Geige*—given equally in Virdung, 1511, in Suscinius (Ottmar Nachtigall), "Musurgia seu Praxis," 1536, and in Martinus Agricola's "Musica Instrumentalis," 1532—is in three sizes—discant, alt or tenor and bass geige. The *gross Geige* was also made in three or four sizes, it must not, therefore, be thought that it was merely the bass of the other. The first mention of the word *Geige* in German literature occurs, according to Grimm in the 12th century, in "Judith," a poem of the 12th century given in Diemer's Deutsche Gedichte des 11 and 12 Jh. Wien, 1849.

"Mit vigelen jorich mit gigen,
"Mit rotten jorich mit liren,
"Mit harphen jorich mit springen,
"Mit tanzen jorich mit singen
"Chômen si ûn entgegen."

(gedichte 139, 11.)

Several other examples occur in the early part of the thir-

teenth century, as, for example, in Wolfram von Eschenbach's "Parsifal," and "Der Junge Titurel," respectively:

"Ern ist Gîge noch diu Rotte,"
"*Either the geige or the rotta,*"

and

"Diu Rotte noch diu Gîge,"
"*Neither the rotta nor the geige;*"

and in Gottfried von Strassburg's "Tristan" of the same century,

"Ir Gige unde ir Rotta."
"*Her geige and her rotta,*"

Authorities are not agreed as to whether the French *guige* or *gigue* was derived from the German *Geige*, or *vice versâ*, and it is not purposed here to enter upon the question of the names of instruments, which would fill a long chapter.

It seems probable that the word *geige* may have been applied in Germany to the first stringed instruments played with a bow, in contradistinction to those whose strings were plucked by fingers or plectrum,* such as the *cythara*, rotta and fidula or *fiedel* (see p. 424). The names *geige* in Germany and *gigue* in France were in the middle ages applied to instruments of the rebec type with fingerboards. As we have every reason to believe that the bow was first applied in Europe to instruments of the rebab family, both boat and pear-shaped, that it was indeed made known through these instruments, the probability is that the name *geige* clung to them long after the bow had been applied to other stringed instruments derived from the cithara, such as the fiddle or vielle. This hypothesis is supported by several authorities and amongst them, Moritz Heyne who in his "Deutsches Wörterbuch," Leipzig, 1890, gives under the word *geige:* from the middle-high-German

* For the use of the word citharisare, meaning to twang the strings, and the generalisation of the word cithara, see pp 335 and 424.

gîge, originally designating the manner of playing the geige, so named after the rocking motion of the bow (middle-high-German gîgen, to rock, old Scandinavian *geiga*, to sway).

Dr. Lexer "Mittel-hoch-deutsches Handwörterbuch," Leipzig, 1872, gives under the word *gîgen*: literally to set vibrating, trembling: old Scandinavian *geiga*, to tremble.

Fig. 158 represents an example of the last relic of the rebec class—it can hardly be called a development, for the instrument was then rapidly declining; it is the pochette, sordino, or Taschen Geige (pocket geige), a little instrument some fifteen to eighteen inches long, used by dancing masters of the sixteenth, seventeenth and eighteenth centuries; during the latter it was practically abandoned for the kit, a diminutive instrument shaped like the violin. For this illustration I am indebted to the same source as for the preceding; this instrument is an original, dating from about 1700. In outline it most nearly approaches the old boat-shape, but it has felt the influence of the violin in its accessories; there is a finger-board, a head surmounted by a grotesque and containing an orthodox peg-box; the bridge is raised and arched, to take the four strings; the wedge-shaped tailpiece is very similar to that of the violin; the sound-holes are long and narrow; the instrument is bowed and gives out but a thin, weak tone.

Fig. 158. Sordino or pochette, circa 1700. Galpin Collection.

A very good illustration of a "pera," or "poche," is given by Martin Mersenne in his 'De Instrumentis Harmonicis"; and another of a courtly dancing-master with a sordino like that in Fig. 158 is given by Vidal in his quaint work, "La Chapelle de S. Julien des Menestriers."

We have now traced the developments of the Moorish rebab as far as possible, and we find that after it became known to the

Europeans the instrument underwent various changes, and that it undoubtedly gave a great impulse to the making of stringed instruments during the early Middle Ages. To it, in conjunction with the tamboura or pandura, we owe the many types of stringed instruments with vaulted sound-chests which are to be seen in the mediæval miniatures and sculptures, and side by side with the hybrids we still find the original long boat-shaped type. The rebec seems to have enjoyed highest favour during the eleventh and twelfth centuries, though under what name it was then known we can but conjecture. In the fourteenth century we find slighting allusions to the instrument, *rebekke* in English, and *el ravé gritador* in Spanish. It is called shrill and shrieking, and its popularity was on the wane; it was chiefly the instrument of the wandering minstrel of no very exalted rank. There is no doubt it was better adapted for open-air than indoor music. In England, from the fourteenth century, the rebec was often ornamented with a grotesque head, and when played with a plectrum became the cittern or ghittern, of which we hear already in the time of Chaucer.

During the seventeenth century in France opprobrium was heaped upon it, and in the statutes of the Guild of Musicians (founded in the fourteenth century), known as "La Confrérie de St. Julien des Menestriers," confirmed by Louis XIV. in 1658, we find in rule iv. "that it was a punishable act for the masters of the guild, or any other musicians, to play their instruments (violins) in taverns, &c., under penalty of imprisonment and forfeiture of the instruments." Fétis, in quoting this, states in a footnote, that the rebec was excepted. The statutes will be found in Vidal's book before quoted, and he states that he copied them from the printed records in the Bibliothèque Nationale, F. 2795.

It is recorded, moreover, in confirmation of this point, that the Civil Lieutenant of Paris gave sentence on March 27th, 1628, that "no musician was permitted to play in taverns, or any

such low places, upon the discants, basses and other members of the violin family, but only upon the rebec." See "Bibliothèque de l'Ecole des Chartes," A., vol. iv., p. 543.

The best proof of the want of popularity of the instrument lies in the fact that it has now practically died out, although we do hear that it was still occasionally met with in primitive villages in Brittany some twenty years ago, and in Mr. Galpin's collection there is a rebec bought from a rustic in Athens which he called "lyra." The instrument (Fig. 159) is exceedingly primitive and roughly made, but it has all the characteristics of a rebec, or gigue: there are three strings fastened to pegs set in the back of the head, the middle string being strained over an additional wooden stud to equalize the tension; both sound-post and bass-bar are present, the former being made with a little notch in the side upon which the bridge rests, thus, as Mr. Galpin pointed out, presenting a certain affinity with the bridge of the Welsh crwth. (See Fig 33). The tail-piece is of the most primitive, being of twisted wire attached to a little keel-like projection cut on the back of the instrument.

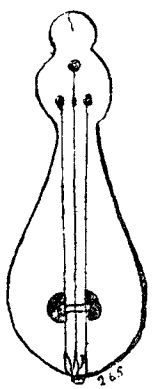


Fig. 159.
Modern primitive "lyra," or rebec, from Athens. Galpin Collection.

The third point to consider before closing the chapter is the extent to which the rebab influenced the evolution of the violin. This is a much-discussed question, and one upon which antiquarians do not agree; I do not find it possible to acknowledge any influence except the use of the bow, which, after all, is an adjunct, and not part of the instrument itself; the bow was, besides, applied equally to the rotta, and to many of the hybrids of the rebab-tamboura type, and to the tromba marina besides.

The violin certainly does not owe its sound-chest to the rebab—for no two instruments could be more dissimilar in that

respect—nor its neck, nor the fingerboard. Neither the rebab nor its successors had incurvations; their sound-holes were, generally speaking, Oriental in character, as were the head and arrangement of the pegs in the back. Nothing remains, therefore, of the violin that can be said to be derived from the rebab.

It might be worth while to study the subject still more deeply, but that investigation seems called for in another direction. There was co-existent with the rebab a Moorish instrument having a very decided affinity with the violin, the cithara or guitarra, an instrument which was no longer the cithara of the Greeks, since it had a neck and four frets. Of this I shall have occasion to speak in the next chapter. We have, further, the complete evolution of the cithara into just such an instrument depicted in the valuable pages of the Utrecht Psalter, from the cithara with rounded base, to the instrument with a body of similar outline and a long added neck with frets and three strings. This development we undoubtedly owe to the East, but not to the Moors originally. How these instruments of the Utrecht Psalter, whose influence we can trace in the twelfth and thirteenth centuries, became known in Europe is at present purely surmise (I have not given up the hope of tracing them), but we have in addition the evidence of the word *violin* itself, which can be traced back by two separate sources to the Latin *Fidicula* (another name for the cithara. See San Isidore, Etymologiarium, lib. iii., chap. 21). This was discussed in the chapter on the question of the origin of the violin.

CHAPTER X.

The Guitar-Fiddle.

In this chapter, one of the most important, in which much new matter will, it is hoped, be brought forward, the subject will first be treated from a general point of view, that is to say, we will glance at the guitar-fiddle as we find it in the Middle Ages before entering into details as to its history.

What is the guitar-fiddle, and how is it that it bears a compound name designating two instruments of such very different types, judged from a modern standpoint?

It must be confessed that this name, which we bestow upon the precursors of the violin during the eleventh, twelfth, thirteenth and fourteenth centuries, is entirely modern, and there is absolutely no reason to think that the term guitar-fiddle was ever used before last century. The name has arisen through retrospection; each instrument, the guitar and the fiddle or violin has now reached approximate perfection, and possesses clearly defined characteristics, which we take into consideration in imposing the name, and we pay a well-deserved tribute to the guitar in recognizing it as the parent or precursor of the violin.

What we more especially wish to convey by the name is the fact that the instrument in the shape of the guitar, which at first was exclusively vibrated by the fingers, adopted at a certain period the use of the bow; that, at least, is my opinion, and the point to be settled is the period at which the change took

place. The guitar-fiddle, in fact, existed as soon as the instrument with a neck evolved from the cithara was played with a bow. Writers who recognize the guitar-fiddle at all have generally placed the transition in the thirteenth century, and what is more, they look upon the fiddle as a separate instrument which existed independently of the guitar, whose waist is borrowed for the sake of bowing more conveniently. In the article "Violin" in Grove's Dictionary of Music, the "invention of the waist" is assigned to some unknown mechanic of the thirteenth century; the writer evidently does not recognize the existence of the guitar at that period.

When the subject is treated in detail, and a number of new illustrations are introduced, the reader will be able to form his own opinion. The guitar as a descendant of the kithara always had incurvations, and, as regards those to which the guitar-fiddle has hitherto owed its name, I consider that they are anterior to the thirteenth century; and, secondly, that their existence has nothing to do with the use of the bow; nor are they a European development.

Fig. 160 represents a large instrument with incurvations played with a bow and held like the violoncello between the knees; it forms part of the capital of the Abbey of St. Georges de Boscherville, near Rouen, which was founded in 1066 by Raoul, Sire de Tancarville. The abbey was demolished in the sixteenth century, but the sculptures were preserved, and are at present in the museum of Rouen.

Fig. 160.

Large vielle with incurvations, 11th cent. From the Abbey of St. Georges de Boscherville, near Rouen.

With regard to the probable age of the instrument, a piece of sculpture dating from the eleventh century would not represent quite new instruments, for the sculptor of that period would have little time

or opportunity to ascertain the form of practically unknown instruments—means of communication were too restricted and travelling too slow; he would choose for his model a well-known instrument easily available to copy. The illustration is taken from Willemin's "Monuments Inédits," which rather represents the instrument as it was than as it is, and shows firmer and more unbroken lines than the remains of the sculpture do at the present day, for they have become chipped, worn and broken: fortunately this valuable piece of evidence has not been restored. Willemin cannot be accused, however, of giving a fanciful reproduction, he has merely restored the jagged outline. A more realistic drawing will be found in Rühlmann's "Geschichte der Bogen Instrumente," Atlas, Taf. III. No. 1B. Before proceeding, it will be as well to give an example of what is commonly understood by a guitar-fiddle of the Middle Ages.

Fig. 161 is taken from a French MS. (Add. 28784A) in the British Museum, dating from the fifteenth century, a Book of Hours, of which the paintings are of coarse art, but in the margins are pasted beautiful illuminations cut out of a Psalter of the thirteenth century, and Fig. 161 is one of the latter. The figure is one of the animal grotesques so common in MSS. of the thirteenth and fourteenth centuries. The guitar-fiddle has well-defined incurvations, and but for the absence of corner blocks has, roughly speaking, quite the outline of the violin; the finger-board is unmistakable, the artist has forgotten the bridge.*

Fig. 161
Guitar-fiddle, 13th cent. Add. MS. 28784A, Brit. Mus.

* There should be two sound-holes which should lie just across the path of the bow, for this omission I must plead guilty, I have only now detected it.

It will be urged that illustrations of guitar-fiddles are comparatively rare, in the eleventh and twelfth centuries particularly, whereas so-called oval vielles without incurvations and all kinds of rebecs and gigues abound; that is undeniably true, but then the violin and its precursors down to the cithara were always the instruments held most in honour, the instruments of musicians and professionals of high degree, and as their construction required greater skill and better materials, the specimens did not multiply in the same way as did the rebecs and hybrids: the citharas, guitars and vielles were made according to model and rule, the makers required experience and training, whereas the other instruments, whose construction was more or less the result of venture and experiment, and whose types are legion, were attempted by one and all; hence the confusion and the extreme difficulty of classifying the mediæval-stringed instruments.

Both the words *guitar*, *fiddle*, and, in addition, the *violin*, are derived from one common source, and can be traced to the names given at various times by different nations to the Assyrian ketharah, which in Greece became kithara; in Rome cithara—there the instrument was known also under the name of fides or fidicula, possibly because it was the chief stringed instrument with both Greeks and Romans. In Arabic of the present day the word kithara is still in use, but the Arabs of North Africa pronounce it *githara* (with a hard "g" and a "th" as in "thick"); that is precisely the region whence came the conquerors of Spain in the eighth century. In mediæval Arabic the word was cuitra or cuitara (see Vocabulario Español-Arabigo, Tanger, 1892), and among the Spaniards guitra and guitarra.

In Italy the word cithara became chitarra, and the English, apparently influenced by Spain, probably through the medium of France (which knew the guiterne), had in Chaucer's time

both citterns and gitterns, as far as we know, very similar instruments.

> "For sorwe of which he brake his minstralcie.
> Both *harpe* and *lute*, *giterne* and *sautrie*:

Phebus in grief at having slain his wife with a random shot from his bow gives up his minstrelsy." (The Manciple's Tale, 17217, Chaucer's Canterbury Tales, fourteenth century).

The word gittern is also spelt gyttren and gythornis in other poems of the same and the next century.

Gitterns and citterns appear to have been named more with reference to the manner in which the strings were vibrated than with regard to any characteristic shape of the instrument. *Citharisare* meant in Latin to twang the strings, either with the fingers or plectrum, as in the cithara; this accounts for the great variety of instruments known as citharas, and for the translations of the name in psalters. As this generalization of the cithara is only observable *after* the introduction of the bow was a recognized fact, we cannot be far wrong in assuming the names derived from cithara to have been applied as a distinguishing term for stringed instruments of which the strings were plucked and not bowed. Examples will be given later of a few of the instruments so called.

In a letter written by Cuthbert, Archbishop of Canterbury, to Lullus, second Archbishop of Mayence, about 750 A.D., there is an example of the use of this verb:

"Delectat me quoque cytharistam habere qui possit cytharizare in cithara quam nos appellamus Rottæ quia citharam habet." (See Giles's Patres Ecclesiæ Anglicanæ, letter No. 114).

Thus is the word guitar cursorily accounted for; it came to us from the East, and travelled West by two routes—through the Roman Empire on the one hand, and by way of Africa and the Moorish dominions on the other. The instrument called cithara that came by the first route was still in its simple form

when introduced by the Romans; it became firmly rooted wherever implanted. The second traveller, the Moorish kithara or githara, had undergone important transitions (according to Al Farabi), and it only needed a little European enterprise to turn this instrument into the guitar-fiddle.

Meanwhile, the Romans had taught the early inhabitants of Iberia to call the ketharah (probably originally made known to Spain by the Phœnician colonists) fidicula or fides. San Isidor, Bishop of Seville in the seventh century, plainly tells us as much in his Etymologiarium (lib. iii. cap. 21): "Veteres aut citharas fidicula vel fidice nominaverunt," and this *fidicula* was in time turned quite naturally by the soft Southern tongue into vihuela. In France we get vielle; in Italy and mediæval Latin, vitula, viula, and later, viola; in Germany it was fidula or vidula already in the ninth century, for the word is used by Ottfried of Weissenburg, 840 to 870, in his Harmony of the Gospels, where the beauty of Heaven is described.

"Sih thar ouch al ruarit
This *organo* fuarit
Lira joh *Fidula.*
Joh managfaltu *Swegela* (flute)
Harpha joh *Rotta.*
Joh thaz joh Guates dohta.
Thez mannes muat noh joh giwuag
Thar ist es alles gennig
Thoz Spiel, thaz seiton fuarit
Joh man mit hanton ruarit
Ouh mit *Blasanne*
Thoz horist thu alles thanne."

(See Schilter's Thesaurus Antiq. Teut., Vol. I., p. 379).

This gives quite a list of the musical instruments of the time; if we could produce contemporary MSS. from Spain, France, Italy, in which these musical instruments were quoted, we might learn something on the very knotty point, for the names lira, rotta, cithara, gigue, fidula, vielle seem to have been applied more or less at random until the fourteenth century, which is

scarcely surprising, seeing the variety of hybrid instruments one comes across in every century.

A curious definition of a lira, for instance, occurs in the thirteenth century, in which kinship is claimed for it with cithara, viol and rote. The lines are taken from Coussemaker's "Mémoire sur Hucbald" (Paris, 1841), in which is quoted a note in writing of the thirteenth century, made in Allain de Lille's "De Planctu Naturæ"; "*Lira* vioel. Lira est quoddam genue citharæ vel fitola alioquin de reot. Hoc instrumentum est multum vulgare."*

(The lira or fitola is of the genus of citharas, otherwise of the rota. This instrument is very common).

During the early Middle Ages stringed instruments seem to have been chiefly used to accompany the voice, or to play a little ritournelle between the verses or parts of the songs. The vielle figures by one or other of its names in most lists of musical instruments that we find in MSS. of the Middle Ages, showing that it was a favourite instrument.

Galfridus de Vim Salor, one of the most distinguished poets of the twelfth and thirteenth centuries, who followed Richard Cœur de Lion to the Holy Land, says in his "Medulla Grammaticæ, Coloribus Rhetoricis":

> "Cymbala præclara, concors symphonia dulcis,
> Fistulæ, somnifera cythara, Vitulæque jocosæ."

Those two lines convey a good deal in a few words, and characterize strongly the tone-colour of the various instruments. The bright, clear cymbals, not the clashing cymbals of our orchestra, but the ancient cup-shaped cymbals with a definite musical pitch and a clear bell-like tone; the cythara, and not for the first time, is characterised as soothing and conducive to

* For a vocabulary of the 11th cent. containing the names of many musical instruments accompanied by short definitions or explanations, see J. A. Lenoir de La Fage "Diphthérographie Musicale," p. 363 et seq from a MS. at Monte Cassino.

sleep—since the introduction of bowed instruments, those whose strings were plucked naturally sounded unusually weak and sweet in comparison; finally we have the joyous vitulas (or vielles) and pipes and the sweet harmony of the symphonia or hurdy-gurdy of the thirteenth century.

Another poet of the thirteenth century, and a minstrel in the train of King Thibaut of Navarre, Colin Muset by name, mentions the vielle and bow used in accompanying song:

"J'alay a li el praelet (meadow),
O tot la vielle et l'archet
Si li ai chanté le Muset."

In the "Roman de Brut" (twelfth century) verse 10823, &c., we find a description of the court music of the age:

"Mult ot à la cort pigleors,
Chanteors, estrumanteors;
Mult poïssiés oïr chançons.
Rotruenges et noviax sons
Vieleures (music of the vielle), laïs de notes;
Lais de vielles, lais de rotes
Lais de harpe et de frêtiax (syrinx),
Lyre, tympres (drums) et chalemiax (shawms),
Symphonies, psaltérions,
Monacordes, cymbres, chorons."

No other kindred stringed instrument was used apparently in this court orchestra, and the vielle is at the head of the list.

It is interesting to note in these lines the distinction between the "pigleors" or minstrels who sang, and those who played the musical instruments or *estrumanteors*. The nobles, who took up minstrelsy and sang of gallant deeds and love after the manner of professionals, could not always accompany themselves; they used, therefore, to travel with paid estrumanteors in their train, who accompanied their lays and played solos when required. This is probably the explanation of the second line.

The vielle is again mentioned in the same poem at verse 3765:

"Et mult sot de lais et de note
De viele sot et de rote
De lire et de saltérion."

"*Note*" in both quotations means the playing of instruments either in accompaniments or as solos.

In the "Roman de Rou," verse 3093, &c., of the same century, there is a description of a time of sadness and desolation when even vielles and rotes were silent:

"Mult aviet par la terre plors et dementoisons.
N'a vieles ne rotes, rotuenges ne sons.
Meis (même) li infez plorent par plusors des mesons."

From these lines it is clear that vielles and rotes were great favourites and much in request.

In Chaucer's time (fourteenth century) the *fidel* was evidently still an article of both intrinsic and artistic value:

"For him was lever han at his beddes hed
A twenty bokes, clothed in black or red,
Of Aristotle and his Philosophie,
Than robes riche or fidel or sautrie."
—*Prologue*, v. 298.

Vielles existed throughout the Middle Ages in a variety of shapes and styles, and every country did not understand precisely the same instrument under the name. For instance, what was the fidula of Ottfried in the ninth century? Was it already a bowed instrument, or was it not more likely akin to the cithara—the cithara in transition, in fact—"Lira joh Fidula"? Each must form his own opinion on the subject, for at present we have no means of knowing.

In the fourteenth century, at all events, there was no doubt about the relative value of rebecs and vielles or fiddles, for Chaucer, who told us that a fidel was worth more than even twenty books of philosophy, also says:

"Brother, quod he, her wonneth an old *rebekke*
That had almost as lefe to lose hire nekke
As for to yeve a peny of her good."—*Freres Tale*..

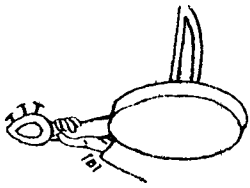


Fig. 162.
Oval vielle, 14th cent.
Add. MS. 27695, Brit. Mus.

The quotation testifies to the want of esteem in which the rebec was held. The oval vielle was the most prevalent form, and we know at any rate for certain that in the fourteenth century the type shown in Fig. 141 was called *viola*, for the name is written over the instrument in the MS. The oval vielle had a flat back and sides or ribs (see Fig. 162); this illustration is taken from Add. MS. 27695, "A Treatise on Virtues and Vices" by a Genoese; in it is depicted an Eastern banquet. A potentate is seen at table, feeding on what appears to be limbs of little white dogs. Some of the latter stand gazing in terror at the dishes, awaiting the same fate as their unfortunate companions. Behind and at each side are musicians playing on double pipes, fiddles and a tuba. On the same folio, but on a lower section, is a fine pneumatic organ being played and blown by men kneeling, while a woman with a large bell strapped round her waist plays on two kettledrums fastened to the back of a black slave; he is playing the cymbals, and two more musicians are blowing long straight trumpets. This is quite a large and important orchestra; the MS. is altogether very interesting and very finely illuminated.

By a vielle, then, we understand an instrument with flat back (or at least not vaulted) and a sound-board joined by ribs, as far as we can judge from illustrations; the neck is generally added, and there is sometimes a finger-board very clearly indicated in the illustration; the number of strings varies either in reality or from the fancy of the artist, and it is played with a bow.

Whether our forefathers held the same views as to this classification is quite another matter—probably not. Those instruments made by amateurs, and which differed more or less in outline and detail from the best known models of the age,

Fig. 163.

Bowed instrument, 11th cent. From the Abbey of S. Georges de Boscherville, near Rouen.

were doubtless called vielles also; they, too, have found a place in the miniatures of the MSS., and in paintings and sculptures.

Until more documents come to light we cannot be sure one way or the other. For instance, were instruments like those in Figs. 163 and 164 called vielles, and if not, what were their names? Fig. 163 represents a musician from a capital in the Abbey of Boscherville, founded in the eleventh century, as was stated with Fig. 160. The instrument is oval and has but little neck, like the early rebecs, and that all in one piece with the body; sound-holes and tail-piece are indicated, so are four strings. This instrument, if the back was vaulted, was one of those hybrids which were the outcome of tambura and rebab.

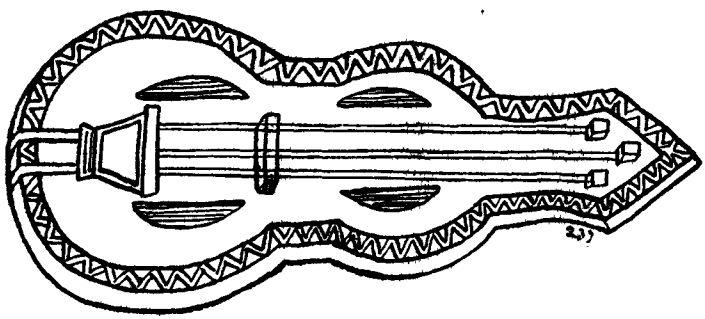


Fig. 164.

Stringed instrument of the 12th cent. From a gateway in the Abbey of St. Denis (from Willemin, "Monuments inédits.")

Fig. 164 is composed of sound-board and back with short neck, connected by ribs; there is, at least, reason to think the back was flat rather than vaulted. The bridge appears to be nothing more than a rectangular block of wood without any arch, which would make the bowing a matter of some nicety;

the incurvations here form a distinct waist. This shape with the two distinct lobes is often met with in MSS. of this and the two succeeding centuries.

The owners of these two stringed instruments probably called them vielles.

No language in the mouth of the masses remains long uncorrupted; words are modified, new ones are introduced to meet the needs of the day, and the meaning often changes radically. This was the case with many musical instruments, to cite the cithara alone.

We who have the perfected instrument, the violin, are able also to examine what is left of the oldest types of stringed instruments, and we can trace these types through all their wanderings without turning aside at every side branch, however puzzling and misleading.

A strong plea has been advanced in favour of the European origin of the violin; leaving the Eastern and older civilizations out of the question altogether, our obligations to the latter are yet great in every other department of art and science. According to some, Germany is the fatherland of the fiddle; according to others, Wales; others again name Italy; yet of what avail is it to shut our eyes to the fact that prototypes of what we have seen developed often beyond recognition were to be found in Egypt, China, or Chaldea? If among the musical instruments of the ancient Egyptians we find the unmistakable prototypes of all the stringed instruments which flooded Europe during the Middle Ages, is it unreasonable to suppose that these reached Europe later by means of the Roman and Byzantine Empires through the Greeks of Asia Minor, of Northern Africa, or through the Moors, who, conquering the latter, brought their civilization to bear upon Spain and France?

Some of these instruments have been casually mentioned and illustrated in these pages, others have been reserved, and it is

now proposed to go into the matter carefully, with a view to finding out where this guitar-fiddle came from, and to illustrate side by side the prototype and the instruments of other climes and ages that seem to correspond with them in the matter of construction. If this attempt at classification seems startling at first sight to those who have long held different views and theories, I must ask their patience and forbearance and an impartial consideration of the question.

In the oldest known civilization, the Egyptian, we find stringed instruments very fully represented, and it is not perhaps too much to assert that the prototype of almost every European mediæval instrument of which the strings were either bowed or plucked (the bow, however, excepted) has been found represented in the paintings or sculptures of Egypt.

The harp and nefer seem to have been the favourites, for they figure in all scenes of civil and private life in which music had a part; they vary in pattern and detail, but in all Egyptian harps the pillar is absent.

The nofre, or nefer, is used as a hieroglyphic symbol for "good," which speaks for itself; in the hieroglyphs the nefer looks somewhat like a spoon with two or four pegs inserted laterally in the head; the neck and body are in one piece. A similar nefer is also frequently depicted with a very long added neck; in both of these the sound-chest consists of a flat back and sound-board with ribs, or at any rate what appear in delineations to be ribs. The oval tamboura with vaulted back is less often seen; it resembles the nefer, unless seen in profile; many of the oval instruments in the hands of musicians may, therefore, be tambouras and not nefers. With regard to the pear-shaped tambouras, we have what is better than any number of illustrations, *i.e.*, a real specimen which has already been shown in Fig. 101.

There exists also at least one representation of a real Egyptian guitar with ribs and slight incurvations. I say *at*

least, because there is a second known to me (given in Mendel's "Musik-Lexikon," Vol. I., p. 50, "Aegyptische Musik"), but as the authority is not given, I do not recognize its value as evidence.

The Egyptian cithara, or lyre, as it has also been called, although on account of the construction and shape of the sound-chest I prefer to use the former name, is recognised by one unvarying characteristic: the transverse bar to which the strings are attached is slanting, one arm being shorter than the other, so that the pitch of the strings is determined by length as well as thickness. To tune the instrument, the strings can be made to slide along the bar, thus increasing or decreasing the tension and length as desired.

Of all these instruments the Greeks seem to have taken but little notice, the kithara excepted, and this instrument came to them from Asia and differed greatly from the Egyptian model. In the hands of the Greeks the kithara became a national instrument, an almost inseparable adjunct to the arts of music and poetry, and was passed on by the Greeks to the Romans, with whom it was also the chief stringed instrument. Through the Romans and the Phœnicians the cithara spread by degrees over the Continent of Europe.

We know, however, that Greece and Rome did not remain entirely uninfluenced by the instrumental music of Egypt and Asia, more especially at the beginning of our era, for we have single examples of some of the Egyptian instruments mentioned above on sculptures; but these instances are rare, and seem to show that the instruments they represent were by no means popular or widely known.

The origin of the rebab appears to be rather Asiatic than Egyptian, since no traces of it are to be found in ancient Egypt; the Arabs themselves, from whom we learnt to know it, say they obtained it from the Persians, a statement which obtains corroboration through examples of the instrument

clearly delineated on silver dishes of the Sassanian period (see pp. 402, 407 and 408 and Pl. XI.). As a whole chapter has already been devoted to this instrument, it is unnecessary to do more than remind the reader of the plain facts now that the mediæval European instruments and their prototypes are to be given side by side.

It is possible that the long, boat-shaped rebab, of which the shape appears to have gone through little or no material change during our era, was the outcome of the pear-shaped tamboura and the cithara, both of which were known to the ancients, or else it may have preceded or succeeded the primitive *nanga* shown in Fig. 100, the sound-chest of which resembles that of the rebab.

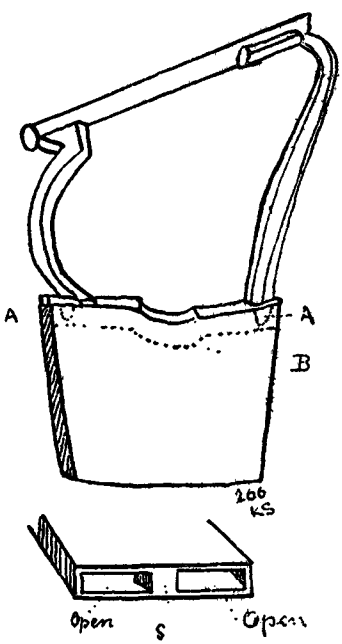


Fig. 165.
Egyptian kithara from Thebes, in the Museum of Antiquities, Leyden.

In this juxtaposition of mediæval and ancient instruments, it must not be forgotten that in the former the march of the centuries brought with it great activity in the construction and wide-spread influence of musical instruments, and that instances of the national cult of one instrument, as in the case of the kithara with the Greeks, are almost unknown. Musical instruments rapidly became cosmopolitan, receiving here and there national touches and characteristics which resulted in what appears to us an endless confusion of models.

The first instrument to claim our attention will be the cithara seen in Fig. 165; it is a sketch of a real instrument found in

Thebes, and forming part of the d'Anastasy Collection at the Museum of Antiquities, Leyden; it is in a very good state of preservation. As far as I know, there are but two specimens in existence, the second is in the museum at Berlin; it is therefore of very great interest to musical antiquarians and Egyptologists.

The sketch represented in Fig. 165 was originally taken from Sir Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians,"* but there are a few little additions that were made for me in Leyden by the director of the museum, Meinheer W. Pleyte, to whose kindness I owe some interesting information as to the construction of this ancient cithara.

As will be seen, it has the oblique transverse bar described in the last chapter, which seems to be characteristic of the Egyptian instrument, whereas the Asiatic and Greek citharas were generally fitted with horizontal bars resting on arms of equal length, the pitch of the strings being varied by thickness and tension instead of length.

In Fig. 166 we see a group of Assyrian musicians, and both Asiatic and Egyptian citharas are being used.

Until lately I had always thought that in the construction of all box-like sound-chests the back and front were joined by means of sides or ribs, and this very illustration in the book referred to above is responsible in a measure for this theory; for in it the sides are distinctly drawn as separate pieces; the

* London, 1878, Vol. I., p. 478. The invaluable results of the labours of explorers of all nationalities in Egypt and Assyria which are published year by year (see Bibliography) show us that we are but at the beginning of our knowledge of these ancient kingdoms, and that we may be called upon to reconsider in a totally different light, the deductions made some years ago. Indeed the musical instruments of the ancient Egyptians and Assyrians demand a separate, thorough and systematic study which has not yet been attempted by the author.

difference is but a slight one in a drawing, a few tiny strokes of the pen suffice. This is the only drawing of a cithara I can remember in which the base and inside are visible. Sir Gardner Wilkinson's illustration was, slightly incorrect I found, on receiving my tracing from the Leyden Museum together with a corrected drawing which is here reproduced. I was much sur-

Fig. 166.

Group of Assyrian musicians with ketharahs, drum, and cymbals from Koyoundjick. "Place," Pl. 59.

prised to hear that not only are back and sides in one piece, but that the whole sound-chest is hollowed out of one piece of wood, from the base to the dotted horizontal line; the little bar, which measures but $2\frac{1}{2}$ centimetres (1 inch), is also of the same piece; the wood is thought to be acacia. The arms are solid, and are fixed to the body by means of wooden pins, indicated in the sketch by dotted lines, and are glued besides. The base

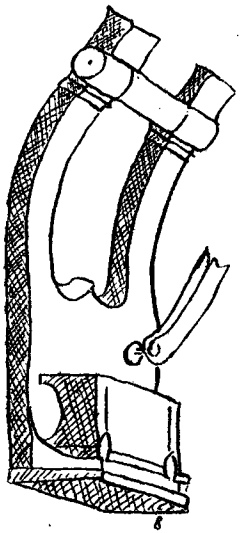


Fig. 19.
Greek kithara, from a Greek vase. Thos. Hope, "Costumes of the Ancients." Vol. II., p. 192.

of the cithara is open, and measures seventeen centimetres across; the sides are also seventeen centimetres long. There are no indications on the instrument of any kind of bridge or string attachment, except the little half hoop of iron wire which passes through from front to back (omitted from my drawing). To this the strings were probably attached, and the little bar was, no doubt, left to strengthen the tail end and to enable it to resist the tension of the strings.

It seems strange that so much trouble should have been taken to hollow out the sound-chest and bar, when the use of glue and wooden pins was known, for the instrument must have been heavy and clumsy in consequence—perhaps this construction was adopted in preference for durability on account of the climate. It does not, however, follow that the Kitharas of the Greeks were made in the same manner.

There is apparently no description extant of the construction of the Greek or Roman kithara, although the instrument was such a favourite and is so often quoted. It was probably too well known. One should, however, not neglect one's duty to posterity. The marble representations are not more reliable than the drawings, for few artists would take the trouble to reproduce all the details of that kind even if they noticed them. We are, therefore, once again brought face to face with a blank wall.

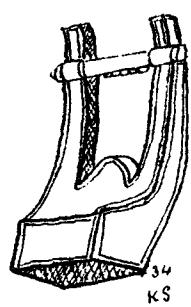


Fig. 22.
Cithara from Rome. Museo Capit. Clarac., Tom. III. Pl. 490.

Fig. 19 is the cithara that we find in the hands of the citharoedes or professionals; it presumably represents the kithara *par excellence.*

In Figs. 104 and 110 the cithara has undergone a transition. There are no longer any arms; the strings extend over the whole sound-chest. The aperture, made right through the sound-chest, so characteristic of the rotta, chrotta, crowd, crwth, is already there, and a slight incurvation is noticeable, which afterwards developed during the middle ages, as seen in Fig. 167—a cittern dating from the reign of Edward I. (1307) and taken from a MS. in the British Museum (Reg. II., B. VII.)

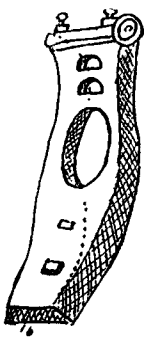


Fig. 104.
Roman cithara (or rotta) of the Lycian Apollo. Mus Capit., Tom. III., Pl. 13.

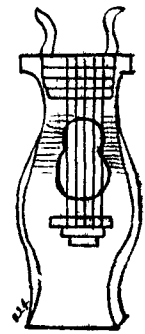


Fig. 110.
Roman cithara (or rotta). From a muse in Rome. Montfaucon, Suppl., Tom. I., 34.

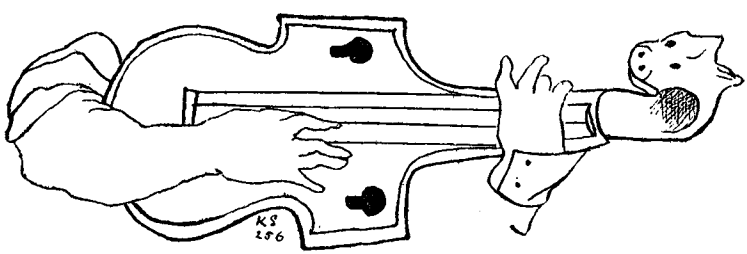


Fig. 167.
Cittern, 13th or 14th cent. Brit. Mus. MS. Reg. II., B. VII.

We do not know exactly how early the cithara underwent its first transition, *i.e.*, when the arms and transverse bar were merged into one, forming with the sound-chest a rectangular body, as in Figs. 112 and 113, and was called rotta, but it must have been before the sixth century in Europe.

In the Utrecht Psalter (ninth century) which has furnished

Fig. 117.
Bass rotta or cithara in transition. Utrecht Psalter, Ps. 149. 9th* cent.

such interesting and valuable evidence as to the transition of the old cithara of the Greeks into the cithara with a neck, or guitar, we already have a large rotta, Fig. 117, repeated here.

There exists, however, in Berlin an old Germanic rotta, found in an Alemanic tomb of the fourth to seventh century at Oberflacht, in the Black Forest. The instrument was lying in the arms of a warrior armed with sword and bow, and was in excellent preservation. The rotta is no fitting instrument for a warrior, but the knight loved the Arts of Peace as well as of war, and so when he was laid to rest his beloved rotta accompanied him, and was thus preserved to us through many centuries. It is so far the only specimen in existence; the original is in the Völker Museum, Berlin, but for the strings and pegs, it is absolutely as it was when found; the holes for the pegs were there to indicate the number, position, and approximate size of the latter.† The Royal collection possesses the facsimile illustrated (from a drawing) in Fig. 168.

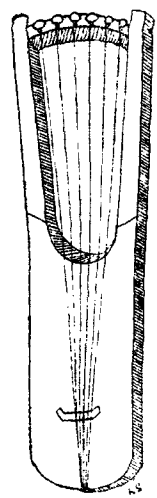


Fig. 168.
Old German Rotta, 4th to 7th cent., Berlin. Völker Museum.

The sound-chest is shallow, and consists of back and sides hollowed out of one piece of wood, apparently with a sound-board added; the edges are, however, quite sharp and clean

* The original, from which the instrument was copied was probably of much earlier date, *i.e.*, 5th or 6th cent. See Chapter VIII.

† Illustration given in Jahreshefte d. Würtemb. Altertums-Vereins III. Stuttgart, 1846. Tab. VIII. Fig. 10 and 11. Grabfunde am Berge Lupfen. bei Oberflacht, 1846.

cut. There are no sound-holes, and the tone of the instrument is consequently weak. The transverse bar is neatly dovetailed and nailed to the rest of the body. The lines seen in Fig. 168, where the arms would in the usual way be joined to the body, do not represent joins, but only indentations or cuts (one centimeter in depth), which extend to two-fifths the depth of the sides. For what purpose these were made it is difficult to say, unless it were to fasten a ribbon or chain by which the instrument was suspended round the neck of the performer. There are six strings fastened to a little peg at the tail-end. The wood is very hard and almost black, so that it is difficult to distinguish joins; but Dr. Oskar Fleischer, the curator of the Royal collection, who has had many opportunities of examining the original, assures me that the construction is as above stated. This is only one step removed from that of the Egyptian cithara in Fig. 165, which was entirely in one piece.

Besides the rectangular cithara or rotta of the Middle Ages, we also find the guitar-shaped, as in Fig. 117, which was still called cithara in Latin as late as the fourteenth century.

In a MS. of the fourteenth century in the Royal Library, Dresden (A 117) a "*Commentary on the Apocalypse*," Rev. xiv. 2, are these words: "*Et vocem quam audiviste sicut citharoedum citharizantium, in citharis suis*" with an explanatory note that by citharedi are designated the twenty-four elders who had cytharas and *citharised*, singing new songs—and, as illustration, there are guitar-shaped rottas with incurvations. (See Fig. 172).

I feel tempted, while on the subject, to mention that in a German Apocalypse of the same century, in the British Museum, the word cithara of the Vulgate is translated *harfin* (Add. MS., 15243, Brit. Mus.). In a French Bible of the fourteenth century (19 D II., Brit. Mus.) for citharas is given *harpes*, as also in a French Apocalypse of the same century (Add. MS., 17333, Brit. Mus.) where in one place cithara has

been translated *citole*, and in another *harpe*, "harpeozs qui sonnent los harpes" and harps are drawn in illustration.

The Egyptian *nefer* or *nofre*, which occurs so frequently in hieroglyphs as a symbol for *good*, is the third prototype which appears to have furnished a model for the mediæval stringed instruments of Europe, the other two being the harp and the kithara.

The nefer is shown in Fig. 169, and it can be seen in addi-

Fig. 169.

Nefer from the Egyptian Obelisk in Campus Martius at Rome. (See Burney's "History of Music," Vol. I., p. 205).

tion in almost every inscription in hieroglyphics. Its shape is sometimes like that of a spoon, an irregular oval with a narrower curve at the base than at the shoulders; the pegs are sometimes two, sometimes four in number, as in the present instrument.

The chief characteristics of this nefer according to the illustration are a long neck in one piece with the body, and a flat back with sides. Supposing the illustrations to be correct, the nefer and tambur* belong to totally different classes. The same

Fig. 146.

Nefer from the 52nd Tomb Thebes-Kourna (Champollion).

features are observable in Fig. 146, here repeated for comparison; in both of these the side view is presented.

* An Assyrian tambur may be seen at the British Museum in the Nimroud Gallery on a bas-relief No. 11a. An illustration is given in Perrot and Chipiez, Vol. II., p. 201. Photograph by Mansell, No. 390. See also Fig. 25 and Chapter IX.

Fig. 169 is reduced from Dr. Burney's illustration ("History of Music," vol. I., p. 205) of the hieroglyph on the broken obelisk, *guglia rotta*, in the Campus Martius at Rome, supposed to have been erected at Heliopolis by Sesostris and brought to Rome by Augustus. It was thrown down and

Fig. 170.
Oval stringed instrument of the 12th cent. Doorway of the Abbey of S. Denis (see Willemin).

broken during the sacking and burning of the Holy City b the Connétable de Bourbon in 1527.

The neck with which the instrument is furnished woul enable the player to obtain various intervals by stopping th strings with the fingers, and so to extend the compass of th instrument without multiplying the number of the strings as i

the harp and kithara. No indication of the use of the bow has been traced as yet in any of the paintings or sculptures of ancient Egypt, and the stringed instruments similar to Fig. 169 are all plucked either with the fingers or with a plectrum.

Whether or no my supposition be correct that the oval stringed instruments with neck and body in one, and sides or ribs, found in profusion from the eleventh century, are derived from the Egyptian nefer, it is singular that the instruments in Figs. 169 and 170 should show such a strong resemblance.

Fig. 170 is taken from a sculpture of the twelfth century on the doorway of the Abbey of St. Denis, which was built under the direction of the Abbot Suger. Here we see more than the mere outline; sound-holes, bridge, tail-piece, strings, and pegs are all indicated, and the under part of the neck is evidently flat as in the nefer. The chief difference seems to me to be in the use of the bow to vibrate the strings. From other paintings on the tombs in Egypt we know that nefers had at times sound-holes, bridge, and sometimes what appears to be a finger-board. These are by no means the only illustrations of this strange resemblance than can be produced; space, however, being limited, they must be deferred for the present.

We now come to the most important of all these comparisons drawn between the prototypes found in ancient Egypt and the instruments of the Middle Ages. I hope to be able to show that the guitar-fiddle with incurvations, which was the immediate precursor of the viol family, and, therefore, of the violin, was derived from the East, probably through the Greeks of Northern Egypt, rather than through the Moors of Spain, or that at any rate the instrument was obtained from both sources almost simultaneously.

The great and essential point of excellence which the guitar-fiddle can claim over other and more transitory stringed instruments are briefly recapitulated as follows: The shape of the

sound-chest (shallow, with ribs); incurvations like those of the modern guitar, without corner blocks; a fingerboard, and a separate neck added to the body.

Now, when one finds an instrument with most of these essential points represented on monuments of the most ancient of all civilizations, and that one finds them again many centuries later among mixed races whose civilization—and above all, arts—are derived from a complex source, is it more reasonable to claim that the mediæval instrument is of European *invention*, that it is the result of evolution, or that it has been transmitted approximately as it stands through the ages? The first of these propositions is of course untenable, and can only be held by those who are unacquainted with the instruments of the ancient Egyptians. The rights of the other two are more difficult to decide upon, and require both thought and evidences to assist in arriving at a conclusion.

I think it has been sufficiently demonstrated that the instrument called guitar was evolved, like its name, from the ketharah or kithara; it was apparently in Egypt that the evolution first took place several centuries B.C.

Younger civilizations, however, rarely receive the objects perfected through evolution; they have been found rather to adopt the primitive forms, carefully going over the ground again, evolving for themselves, and eventually reaching the same goal, but stamping their individuality upon the perfected object. This was the case with the Assyrians, the Greeks, and the Romans, who all received the primitive form of the kithara and passed it on to the Western nations of Europe before it had materially developed. Here, and among the Greeks of the first centuries of our era settled in North Africa and Syria, the evolution was considerably hastened by a close observance of the more perfect forms of other and older nations. In this matter the racial differences are very marked, the evolution being so leisurely among the Eastern civilizations as to be

hardly perceptible in the course of the eight or nine centuries, so far as musical instruments go; whereas among the Western Europeans an almost feverish haste is observable, and during the same period the development of musical instruments made such rapid strides as to have entirely surpassed anything before attained at any period of the world's history.

Thus the rebab of the Arabs of the present day—not the square *rebab-esh-shaèr*, standing on a spike and played like a 'cello, but the boat-shaped instrument—is practically the same as that found in MSS. of the thirteenth century, and notably in the "Cantigas de Santa Maria," so often referred to. We know the Arabs had a guitar, called kithara, in the tenth century, with a neck, four strings, and frets; we have no drawing of it, but it is freely described in Al-Farabi's writings (Kosegarten's Latin translation collated with the Arabic), and it was apparently very similar to the Egyptian guitar copied by D. V. Denon during his travels in Egypt from the paintings on the royal tombs of the Western hills in Thebes (see Fig. 171). This is attributed to the period between 1700 and 1200 B.C. by Mendel in his "Musikalisches Lexicon," where we find the same instrument (reversed) and another guitar with four sound-holes and a head bent back like that of the lute. Unfortunately no authorities or references are given.*

In Plate 55, No. 27, in Denon's "Voyage in Egypt" (London, 1807), the shallow sound-chest of the ancient Egyptian guitar is very plainly indicated, together with what appear to be ribs; they may, however, only be the sides cut in one piece with the back. A fingerboard, such as we understand it, is not plainly

* I have not succeeded in tracing these instruments given by Mendel and Denon in other of the great works on Egypt. It has been suggested by Egyptologists that Denon may of course, have seen and copied the instrument from a tomb at Thebes which has since been destroyed; it is on the other hand also possible that he may have drawn somewhat on his own imagination for the shape of the instrument.

drawn, but the neck is doing duty for one, and there are very slight incurvations. The neck is long, as in the nefers, and is finished with a very modern looking scroll, in which are fixed three pegs.

The figure in Denon's illustration appears to be playing with the left hand; the drawing has probably been reversed. There is no indication, of course, of the use of the bow in this guitar, and the tail-piece serves as bridge as in the present day; the

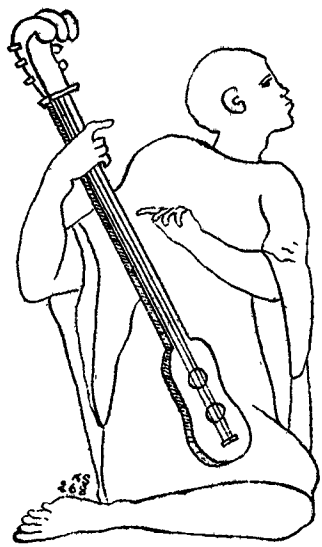


Fig. 171.

Ancient Egyptian guitar, 1700 to 1200 B.C. Denon's "Voyage in Egypt." London, 1807, Pl. 55.

sound-holes are roses, and are placed in the centre, a favourable position for instruments of which the strings are twanged.

The earliest instrument with incurvations and neck of the Middle Ages is the one given in Fig. 123 and again in Fig. 126 the latter with the addition of frets; both are taken from the famous Utrecht Psalter, a MS. dating from the ninth century, A.D., but probably representing instruments used during the early centuries of our era in Asiatic Greece and Northern

Egypt before the destruction of Alexandria by the Arabs in 638 A.D. The instruments shown in this MS. completely illustrate the evolution of the guitar from the cithara in all its transitions.

The guitar-fiddle from Cæsarea, A.D. 1066, (Fig. 173) in a Greek psalter (Add MS. 19352, Brit. Mus.), shows the same long neck with four pegs that go right through laterally as in the nefer, Fig. 169; there is a decided change in the character of the instrument, for this is a *guitar-fiddle*, and the bow is not a very crude example by any means, considering the date of the MS., 1056 A.D., and compared with some of our European bows of the same century. There is still the straight guitar-bridge, but a tail-piece or button has been added to resist the tension of the strings; and a second bridge, an arched one, to enable the bow to vibrate the strings separately. The curious point about this illustration, which has not yet to my knowledge appeared in any musical work, is that it is not European. It is taken from a Greek psalter written and illuminated by Theodorus of Cæsarea, arch-priest in the monastery of . . . . by command of Michael, abbot of the same monastery, in the year 6574 (A.D. 1066). This psalter, like the Utrecht Psalter, contains an extra psalm, No. 151, supposed to have been written by David after triumphing over Goliath. Thus we are told the name of writer and artist, and we know that he was a Greek, a subject of the Byzantine empire; this is the more interesting as the instrument he depicts is one of the very earliest authenticated, having incurvations and played with the bow, that we have; it shows that bowed instruments of the violin type were indeed not only known, but well-known in the East during the eleventh century. This priest, a scholar entrusted with the copying of the psalter and with its illustration, would probably insert the instruments in common use in his own coun-

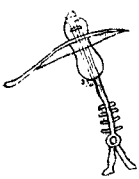


Fig. 173. Guitar-fiddle, 1066 A.D., from a Greek Psalter written in Cæsarea by the arch-priest Theodorus. Brit. Mus., Add. MS. 19352.

try; whether or no the details are accurate we cannot tell, but the general form and the bow, at any rate, we find again and again later in Europe. It is a pity that the sound-holes have been omitted, for it would be interesting to know what was their shape, and whether the influence of the position of the sound-holes on the vibrations of the sound-board had already been discovered. Central rose-holes cause a prolongation of vibration very desirable in instruments of which the strings are plucked; this prolongation becomes highly undesirable with bowed instruments in which the tone can be prolonged by means of the bow. It is impossible that there should have been no sound-holes; they must have escaped the attention of the artist, for a sound-chest without sound-holes would not be able to withstand the tension of the strings and their pressure through the bridge; the thin sound-board would crash through.

The reader must judge whether or no there is any ground for asserting that the guitar of the present day and the guitar-fiddle of the Middle Ages played with a bow owe their origin to the ancient Egyptian instrument shown in Fig. 171—supposing this to be correctly drawn—either through the agency of the Moors or of the Greeks of Northern Africa by way of the Byzantine empire or Italy.

This instrument differs from the Egyptian nefers in many respects, the chief of which is that it has slight incurvations. Fig. 171 shows us that the sound-chest was a shallow one, and that the back of the neck was flat. In face of this illustration it will manifestly be impossible any longer to assert that incurvations owe their *origin* to the use of the bow, for here is an ancient instrument being twanged with the fingers at a time, too, when no trace of the use of the bow with any instrument has been found, and in which incurvations nevertheless exist. They must necessarily have been made for a different purpose, or else from an æsthetic perception of the beauty of undulating curves. In deriving the guitar from the kithara it is not diffi-

cult to account for this undulation, for it existed in many of its prototypes, which, however, do not appear to have been so common in Egypt as the square-shaped shown in Fig. 165.

An example of the cithara to which I am referring is given here in Fig. 172, of which the outline is precisely the same as that of the other ancient Egyptian guitar which is given by Mendel in his Lexicon, but without the neck. Fig. 172 is one of the latest examples of the cithara* which we find bearing that name, for it is taken from a MS. of the fourteenth century in the Royal Library, Dresden (MS. A 117). The MS. is a Latin version of the Apocalypse with commentary, and Fig. 172 is used in common with many other similar instruments to illustrate Rev. v. 8 and 9; the twenty-four elders with crowns on their heads, and these citharas in their one hand and horns or phials of gold in the other, are bowing down before the Lamb: the word cythara in the Latin being further explained in the commentary as an instrument whose shape was said in the beginning to resemble the human chest, and out of which proceeded song, just as the voice came from the human chest—the same which was called *pecten* (*pectis*) in the Doric language. In Rev. xiv. 2 of the same MS. the same instrument again occurs to illustrate "And I heard the voice of harpers, harping with their harps"; and the commentary, besides repeating the Doric origin of the comparison, mentions the cythara as a symbol of the Cross and Passion on account of its having

Fig. 172. Cithara or rotta of the 14th cent. Royal Library, Dresden. MS. A 117, fol. 19.

* A similar instrument occurs on the left wing of an altar-piece painted by Meister Bertram, a native of Minden, working in Hamburg 1367-1415; the subject here is the Adoration of the Lamb (Rev. V. 6-14). The altar-piece which belongs to the S. Kensington Museum, was recently on view at the German Art Exhibition promoted by the Burlington Fine Arts Society, 1906.

strings stretched over the wood. These details are given to show that it is indeed the cithara of the Greeks which was here intended in the fourteenth century by scribe and artist. In comparing similar passages from other manuscript versions of the Apocalypse, I find in a German translation of the fourteenth century (Brit. Mus., Add. MS. 15243), Rev. v. 8, "vor dem lambe habinde alle *harfin* (citharas) und videln (not fiddles, but phials or vials) vol von gutheme geruche und Suzikeit." This confusion between the words cithara and harp occurs already in MSS. of the eleventh century, and was due to the fact that when the use of the bow to vibrate strings became known, the verb *citharisare* in Latin, and in Anglo-Saxon *hearpan*, which had hitherto been used to denote the plucking of the strings, was applied by degrees indiscriminately to all instruments vibrated, like the cithara, by twanging or plucking the strings. In England, for instance, in the Cotton MS., Vespasian A 1 (Brit. Museum), a Latin Psalter dated 700 A.D., the Anglo-Saxon interlinear glosse gives for cithara "*citran*, *citre*, or *citram*," according to the case of the noun, and gives for psalterium "*hearpe*"; whereas in the Cotton MS., Tib. c. VI., 11th cent., the same instrument is translated in the Anglo-Saxon version "*hearpan*," and psalterium "*salter*." To continue our comparison, in a French Bible of the fourteenth century in the British Museum (19 D. ii.) the word cithara in Rev. v. 8 is translated "*harpes*," whereas in an Apocalypse of the same century, also in French (Add. MS. 17333), the word given is "*citoles*," and in Rev. xiv. 2 "*harpeozs qui sonnent los harpes*."

Luther's translation of the Bible (last edition) gives in the same passage "*harffen*."

Before leaving the Eastern field of illustrations, which, if thoroughly exploited and examined, would probably be found to yield some interesting finds, we must consider two more bowed instruments taken from the ivory binding of a MS. in the British Museum, Egerton 1139. This binding belongs to

a Latin Psalter believed to have been written for Queen Melissenda of Jerusalem between the years 1131 and 1144, for it contains in the calendar the obits of her father and mother, Baldwin, King of Jerusalem, who died on Aug. 21st, 1131, and Emorfia, his queen, on Oct. 1st. Melissenda married Foulques, Count of Anjou, who succeeded Baldwin on the throne of Jerusalem in 1131 and died in 1144.

The Psalter contains fine miniatures illustrating the life of Christ and the Virgin, painted by a Greek artist, Basilius, whose name is written on the last one.

The binding, said to be coeval with the manuscript, is exquisitely carved and ornamented with turquoises. Events in the life of King David, symbolic of the cardinal virtues, are represented on the upper side, and on the lower, illustrations of the seven works of mercy, in all of which a royal personage is introduced, who, it has been suggested, was intended to represent Foulques, King of Jerusalem. Near the upper border is inscribed the name of the ivory-carver, "Herodias." This volume is said to have belonged to the monastery of La Grande Chartreuse at Grenoble.

The instruments in Figs. 174 and 175 belong to a scene from the life of King David, in which he is represented as playing on a dulcimer, while various musicians grouped around him play in concert on different kinds of harps and bowed instruments.

Fig. 174 is an instrument with very pronounced incurvations and a neck in one piece with the body, which narrows gradually till it forms a diamond-shaped head; instruments similar to this were used in England in the eleventh and twelfth centuries. Needless to say this is not a guitar-fiddle, such as we understand it, but one of the many hybrids.

Fig. 174.
Vielle of the 12th cent. from Jerusalem. Brit. Mus., MS. Egerton 1139.

Fig. 175, an oval vielle from the same ivory carving, presents a very striking resemblance to the instruments on the doorway of the Abbey of St. Denis (twelfth century), of which one was given in Fig. 170; they were reproduced partly on account of this similarity, which is interesting, inasmuch as it shows that the same types of instruments were in use contemporaneously in the East and in the West. It will be observed in Fig. 175, as well as in Fig. 170 that the bow is not vibrating the strings near the bridge (or in the case of Fig. 175, the place where the bridge would be, had the artist carved one), but nearer the neck, where the body is narrowest.

Fig. 175. Oval vielle, 1131 to 1144 A.D from Jerusalem. Eg. MS. 1139, Brit. Mus.

Fig. 176 shows an instrument with very decided incurvations, which, except that there are no corner blocks, give the body very much the outline of the modern violin. The head is diamond-shaped, as is often the case in the twelfth century, to which this example belongs; the tail-piece is modern-looking, to it are attached but three strings, although there appear to be four pegs in the head; the middle string, which is doubly provided, is probably an instance of the use of a nut or peg, introduced to equalize the tension in the three strings, as was the case in the Rev. F. W. Galpin's modern "lyra" from Athens, illustrated in Fig. 159. The sound-holes are of a shape rarely met with, the only other instance I can recall being in a rotta of the twelfth century (Fig. 40), from a Harleian MS. 2804 in the British Museum. It will be further observed that the bow is very long, and that the instrument is being held in front of the performer more like a cello than a violin, with the head uppermost; this is by no means a solitary example of this position, nor yet the earliest. Fig. 160 showed a large vielle with incurvations which

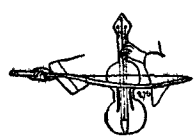


Fig. 176. Guitar-fiddle, 12th cent. Cotton MS., Nero C. IV., drawn by Anglo-Norman artist, Brit. Mus.

the musician holds between his knees, from the Abbey of St. Georges de Boscherville (eleventh century).

The MS. from which this illustration is taken is a Psalter of the twelfth century, by the hand of an Anglo-Norman artist.

Fig. 177. Bowed instrument, with incurvations. 13th cent. Lansdowne MS. 420, Brit. Mus.

The next example (Fig. 177) shows another instrument in 'cello position, between the knees; this, however, although it has incurvations and is vibrated by the bow, is a hybrid, resembling Fig. 174, and not an authentic guitar-fiddle. There are four sound-holes, but the artist has given it no bridge and apparently only two strings. It is evident that the artist's sympathies were more enlisted in the grotesque figure than the instrument he has placed in its hands.

The illustration is taken from an English MS., Lansdowne 420, in the British Museum, a Psalter with miniatures, in which grotesques are incongruously mixed with sacred subjects. There is a considerable amount of life and expression in the quaint animals.

Fig. 178 shows one of the most perfect types of guitar-fiddles; it is of old French origin and dates from the thirteenth century.

The finger-board is distinctly indicated, and so are the sound-holes and tail-piece, but the bridge has been omitted by the artist. The bow is long and slender, and has a handle. There are three strings to the instrument in the MS., but no pegs are to be seen. The figure presumably represents one of the minstrels or troubadours of the period, to whom instrumental music owes so much.

Fig. 178. Guitar-fiddle, 13th cent., French. From a MS. Add. 28784A. Brit. Mus.

The illustration was originally in a beautiful Psalter of the thirteenth century, which was afterwards cut up by some Vandal of the fifteenth century, who has pasted the minia-

tures in his Book of Hours of the Virgin, of which the paintings are very inferior and of coarse art.

It was in the Sunny South, in the Garden of France and in Spain, among beautiful women and courtly knights, that there arose those princely singers, the troubadours, who were the means of disseminating not only the love of song, but also the culture of musical instruments all over Europe. Want of space will not allow of more than a fleeting reference to these romantic guilds of poets and musicians, who laid the foundation of the town orchestras and of the Court Kapelles in Germany.

The courts of the counts of Toulouse, Provence, and Barcelona were the first to foster the art, called *art de trobar* (or *trouver*, in the north of France), and Count Guillaume de Poitiers (1087 to 1127) is said to have been the first troubadour.

In France the troubadour seldom sang his songs himself; he had among his retinue a servant skilled in singing and in the playing of musical instruments; to him he entrusted the interpretation of the songs he composed, and if he did not wish to appear in person or was unable to do so, he frequently "sent his song and his music" by deputy, as he put it; thus the Troubadour Marcabrun said:

"Lo vers e'l son vuth enviar
A'n Jauffe Rudel oltra mar,"

which meant that he would send a professional singer over the seas to sing his song for him. In this respect the troubadour differed from his German contemporary, the Minnesinger, who was known to sing himself.

The professional musicians—that is to say, those who accepted a guerdon or money either from the master in whose train they travelled or from the nobles at whose courts they sang—whether they composed the songs or sang them or played upon musical instruments, were all liable to be included under the general term of *jongleurs* or *jugleors*, a term which meant

joculatores, or gleemen, for they were, before all, expected to amuse the lord and his court with plays, jokes, and antics; but there were many subtle distinctions and ranks, as at the present time. The *jongleurs* included from the first *chanteors* and *estrumanteors*, words of which the meaning is obvious.

Whereas with the *troubadours* and *Minnesingers* love formed the prevailing theme, in Northern France and in England, the *trouvères* and bards sang in a more earnest, heroic strain of warlike or noble deeds. They also engaged professionals to accompany them on their travels and provide the instrumental part of the music; these were variously called *ménestrels* or minstrels, and also *jestours* or *jugleors* and gleemen.

Of these there were many classes: some were *virtuosi* and composers, and only sang and played high-class music of a serious strain; while others also included dance music, dancing, and buffoonery. Their duties in the twelfth century we learn from a poem—"Charlemagne" (edited by F. Michel, London, 1836, verses 413 and 834):—

"E cantent, e vielent et rotent cil *juglur*

. . . . . .

Vielent *ménestrels*, rotruenges et sons."

This impetus given to secular music from the eleventh century spread like a mighty wave all over Europe: the glory of the orchestra was at its dawn. These minstrels were required by their masters of exalted rank to be able to play on at least nine different instruments, each of which, we cannot doubt, had its appropriate use, either for accompaniment, instrumental or dance music.

Giurault de Calanson, to give an instance, asked his minstrel if he could play on nine different instruments, to which he received the following reply:—

"Se sai juglere de *viele*,

"Si sai de *muse* (pipe) et de *frestele* (pan-pipe).

"Et de *harpe* et de *chifonie* (hurdy-gurdy),

"De la *gigue*, de *l'armonie*.

"*Et de salteire* (psaltery) et en la *rote*" (see Forkel's "History of Music," vol. II., p. 744).

Just nine instruments, in fact. We may readily imagine that no great demand was made on the technical ability of a musician who was expected to be proficient on all three classes of musical instruments.

Before all, however, to troubadours and Minnesingers is due, perhaps in a still greater degree than to *trouvères* or bards, the rapid development of the bowed instruments, which were more suitable by reason of their singing quality to accompany the passionate love-songs of the sunny South; while those stringed instruments whose strings were plucked would seem to accord better with the more declamatory style of the dramatic and heroic songs of the North.

It stands to reason, however, that the minstrels and *jugleors* who naturally acquired proficiency in playing their vielles and gigues should try their hand at solo music; first playing a few bars of appropriate music to lead from one verse to the next—thus corresponding to the prelude to an act of an opera, of which indeed the solo song was in some degree the prototype—and next playing interludes between the songs, while their masters, the singers, sunned themselves in the smiles and thanks of ladies fair.

As minstrelsy was practised during the twelfth, thirteenth, and fourteenth centuries in Spain, France, England, Germany, and Italy, we must expect to find traces of the guitar-fiddle in all those lands.

Taking into consideration the characteristics of race, temperament and climate, and the circumstances of the customs and history of the nations, we should naturally hope to find the development of the instrument influenced in some degree by them. This was no doubt the case, yet it was very difficult

for us to get actual proofs of this hypothesis and to acquire sufficient matter to form a basis of study, and this for the following reasons:

Minstrelsy was a roving art which led its votaries through many lands, giving them the opportunity of seeing all kinds of instruments and of acquiring any novelty that appeared to them desirable. On their return to their native land this new treasure would be shown to colleagues, and would be eagerly copied by them as nearly as possible, thus confusing and removing all landmarks for him who should, in years to come, attempt to identify the nationality of specimens. Again, specimens of the instruments themselves not being extant at the present day, we have to depend upon sculptures and miniatures for our study, and should we succeed in tracing beyond a doubt the nationality of the artist who executed any one MS. or sculpture, how can we feel certain that the minstrels depicted with their instruments were of the same nationality? Thus, although an attempt will be made to produce examples from all these lands, dating from the age of minstrelsy, the evidence will yet not be sufficiently authoritative to enable one to assign any given characteristics in the construction of the instrument to one land rather than to another.

THE MINNESINGERS' FIDDLE, GERMANY.

To this statement, however, there is one exception in the case of Germany; in Prof. Rühlmann's "Geschichte der Bogeninstrumente," a work upon which he lavished the best years of his life, and which is to musical antiquarians of inestimable value, we get a collection of bowed instruments of the Minnesingers, which, as far as I know, stands unrivalled in representing the instruments of any one country during this interesting period. These instruments have all the same characteristics: a body and short neck in one piece, with ribs and incurvations, whereas the true guitar-fiddle had a separate neck

from the very first, for it was added to the body of the cithara, as has been before shown.

I know not whether it be chance only which has thrown together so many similar specimens, or that we have not equally rich collections from other lands to judge from, or whether Germany really preserved some individuality in the shape of the Minnesingers' fiddles, owing to France, Spain, Italy, and England forming a common ground for minstrels where the Romance languages were understood, and who left Germany as a field to its own Minnesingers.

The instruments in question are all taken from MSS. of the Minnesingers or from the great Nibelungen Lied, and purport to represent the instruments used by minstrels.

The crowned figure of a minstrel given in Fig. 179 is a good example of this troubadour or guitar fiddle, as I suppose we must call it, since the terms are so often used synonymously, although readers will have an opportunity of observing that there is a difference in the two terms when applied to Germany at any rate.

The back and front of the fiddle, which are flat, are connected by very wide ribs in which the incurvations are very pronounced. The body and neck are in one piece.

There are five strings attached to a wedge-shaped tail-piece, but the bridge has been omitted. The four sound-holes are ear-shaped. Fig. 179 represents a crowned statue in the Church of Our Lady (Liebfrauen Kirche) at Treves, and this illustration is given by Rühlmann (Taf. VII., Nos. 7 and 8, and p. 111. A misprint gives in one place the origin as Aix-la-Chapelle instead of Trèves).

Fig. 179.

Minnesinger's fiddle, 14th cent., German. From the Liebfrauen Kirche at Treves. Reproduced from J. Rühlmann's "Geschichte der Bogen-instrumente," by kind permission of Dr. R. Rühlmann.

In bowed instruments the growth of the neck must be regarded less as a means of increasing the volume of tone than as an indication of the improvement in the technique. It stands to reason that in those instruments of the rebab type, without neck or fingerboard, the technique was necessarily much restricted. In these German minnesinger fiddles the neck is much less developed than in the contemporary or earlier guitar-fiddle of other countries, notably Figs. 173 and 178, and resemble the instruments in Figs. 163 and 170, from St. Georges de Boscherville and the Abbey of St. Denis, with the addition of incurvations, and Fig. 174 from Jerusalem.

Fig. 180 represents "Reinmar der Vidiller," one of the illuminations from the Manesse MSS., made known by Herr von der Hagen in the "Abhandlungen der Berliner Akademie der Wissenschaften," 1842, p. 437, and later in his beautiful "Bildersaal"; five of these are Minnesingers of renown (such as Frauenlob), or the attendant minstrels, and they all hold instruments similar to the two examples here given, one showing the profile and the other (Fig. 180) the full view. This instrument is reminiscent of the citharas or citterns which occur among the minatures of the Stuttgart Psalter.* The instruments of the Stuttgart MS., dating from the Xth cent., were all played with the plectrum and had one feature in common, *i.e.*, a very long neck, apparently in one piece with the long, narrow soundchest, while the outline and details varied. The musicians held their instruments either like the 'cello, or horizontally in front of them.

Fig. 180.

Minnesinger fiddle from Germany, 13th cent. From the Manesse MSS. Reproduced from J. Rühlmann's work, by kind permission of Dr. R. Rühlmann.

The long tail-piece, which we have repeatedly seen

* See Hefner-Alteneck (Jacob H. von), Trachten d. Christl. Mittelalters Abteilung I., Pl. 53, 74 and 75. Stuttgart, K. öffentliche Bibl. Bibl., fol. 23.

in bowed instruments from various MSS., and which is sometimes placed quite in the centre of the strings, is explained by Prof. Rühlmann to be not an error of the draughtsman, but a contrivance for stopping all vibration of the strings between the bridge and tail-piece; the strings, he says, passed through this rectangular damper, and every kind of sympathetic vibration was thus effectually prevented. In order to make room for it, the bridge had to be placed very near the neck, which would by no means improve the tone of the fiddle. I should feel inclined to doubt the correctness of this surmise on that account, and also because in two of the examples quoted in support of this theory, from the famous enamelled bowl from Soissons, the performer is bowing between the bridge and this contrivance or tail-piece, and in three others the bridge has been omitted altogether, showing in all cases the inaccuracy of the artist.

Continuing our study of the instruments of the fiddle-class in use among the Minnesingers of Germany, we find that "Reinmar der Vidiller" (see Fig. 180) had for a coat of arms a fiddle, which is given in Fig. 181. We must notice that it has a short neck of which the lines are parallel, as in our violins, and that the bridge appears to be an arched one. If this really was the case, and is not due merely to the imagination of the draughtsman, we must presume that there was some sort of fingerboard not here indicated, or the performer would have had some difficulty in stopping the strings.

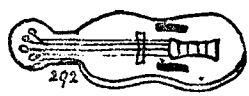


Fig. 181.

Fiddle from Reinmar's coat of arms, 13th cent. Rühlmann.

On comparing Reinmar's fiddle with some belonging to other Minnesingers, this difference in the necks will at once be evident.

The five-stringed fiddle here given from F. von der Hagen's "Bildersaal," and also to be seen in Rühlmann's work already

Fig. 182.
Minnesinger's fiddle, 13th cent.
Von der Hagen's "Bildersaal."

quoted (Taf. VII., No. 11) shows a model with sloping shoulders and a less distinct neck. I am convinced that both kinds of fiddles existed, and were used by minstrels; they are not merely a variation which we owe to the fancy or inaccuracy of the artist who painted the miniatures, for, as I shall be able to show when dealing with the minstrel fiddles of France and other countries, the distinction exists elsewhere also.

In the collection of Manesse MSS. at the Bibliothèque Nationale in Paris there is an exceedingly interesting miniature depicting Heinrich von Meissen, the last of the Minnesingers, who was born at Meissen (presumably the Meissenheim of to-day, near Mainz) in 1260, and died at Mainz in 1308. He was surnamed *Frauenlob* from the fact of his devoting his muse to the praise of woman, and of his using chiefly the word Frau instead of the older word *Weib*, used in preference by Walther von der Vogelweide and others.

In the illustration in question, a personage with crown and ermine cloak, thought to be Frauenlob, is seated on a very much raised daïs, conducting with baton and raised finger a small orchestra of instrumentalists and singers standing below, two of whom have just unrolled a rich carpet on which some great minstrel stands playing his fiddle, while the rest listen with rapt attention, some of them beating time apparently. This solo player is considered by some to be Frauenlob playing to some king or prince. This may be so, but the latter's crown looks hardly important enough for a king.

The other instrumentalists, some of whom wear crowns or diadems, consist of a second fiddler, of musicians playing upon two wood-wind instruments, a shalmey and a cornet, a psaltery, a set of bagpipes, and a little tabor.

An old chronicle relates that when Heinrich von Meissen

died the women of Mainz bore their favourite to his tomb and watered it with their tears.

Fig. 183 represents either Frauenlob or his minstrel, and is taken from the group mentioned above, which can be seen in its entirety in Naumann's History of Music.* The point that concerns us most, however, is the instrument itself, in which neither bridge nor fingerboard is given; the minstrel is stopping a string with his second finger: in all probability the bridge was similar to that in Reinmar's fiddle (Fig. 180), and there was some sort of fingerboard. The shoulders again here, as in Fig. 182, slope up gradually to the head, and the same remark applies to the second fiddle of the group.

Fig. 183.
Minstrel with fiddle, from the Frauenlob miniature, 14th cent. Manesse MSS., Bibl. Nat., Paris. See Rühlmann,† Tafel VII.

In Volker der Fiedler's fiddle (Fig. 184) we see a very modern-looking instrument with incurvations which would seem to call for corner blocks, a very arched bridge, but again no appearance of the very indispensable fingerboard. The shoulders slope off gradually to the head, which is bent back at the same angle as that of the modern violin, and terminates in a kind of scroll. This illustration, from von der Hagen's "Heldenbilder," is not given by Rühlmann.

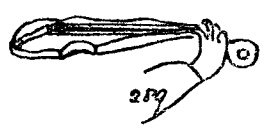


Fig. 184.
Volker's fiddle, 14th cent. "Heldenbilder," von der Hagen. (Reversed).

Volker, the minstrel knight of the Nibelungen Lied, played so sweetly, we are told, in the court of the Palace of Kriemhild

* The History of Music, by Emil Naumann, translated by F. Praeger, 1898-1900. Vol. I., p. 249.

† By kind permission of Dr. R. Rühlmann.

at night, that all the careworn warriors fell asleep as he wished under the magic influence of his music:

"Da klangen seine Saiten und hallten durch das Schloss:
Die Kunst und seine Kräfte, die waren beide gross.
Drauf sanfter nun und süsser zu geigen er begann,
Und wiegte in den Schlummer gar manchen Sorgenvollen Mann."

Translated from the Middle-High-German into modern German by H. A. Junghans (Abenteuer 29).

Fig. 185.
Oval vielle, 14th cent. From the Cathedral, Cologne.
Rühlmann, Taf. III., No. 9.

It must not be taken for granted that the kind of fiddle shown in Figs. 179 and 184 was in universal use in Germany, nor must it be considered characteristic of the Minnesingers upon this scanty evidence. Some day, when opportunity offers of searching the treasures of other lands, a better light may be thrown upon this exceedingly interesting subject, and it may perhaps then be less imperfectly treated than has been the case here.

Fig. 185, for instance, shows an oval fiddle with a finger-

board, but no bridge, unless it has been misplaced by the artist just where the end of the fingerboard would come, in which case the bowing is of course an impossibility, and the stopping of the strings futile. The ribs are wide, and the neck is joined to the body, not made in one with it as in the minstrel fiddles shown previously; incurvations are wanting, however, and one cannot but wonder how the strings were reached without sounding more than one at the same time.

The illustration forms one of the pictures in the Cathedral at Cologne, attributed to the brush of the artist Stephan (fourteenth century), and given by Rühlmann, who calls it a *geige-rubebe;* with this nomenclature I cannot agree, for the instrument appears from its construction—supposing the drawing to be correct—to be a large oval four-stringed vielle with ribs.

From the Cathedral of Aix-la-Chapelle we get Fig. 186, taken from the console of one of the statues of the Apostles; it is classed by Rühlmann among the fiddles. There are neither strings nor bow; the absence of the former is remarkable in a sculpture, for the strings are always cut out of one solid piece, which, one would imagine, would be difficult to break away; the presence of the two little round holes lying in the path of the strings is not easy to account for, either, if we call the instrument a fiddle. The curious-looking tail-piece might represent the badly-drawn crank of a hurdy-gurdy; indeed, it would not require any very great effort of the imagination to see in Fig. 186 a hurdy-gurdy instead of a fiddle, but it would be hardly fair to judge without seeing the original at Aix-la-Chapelle. However this may be, we have in this fourteenth century instrument the outline of the true guitar-fiddle, with incurvations, fingerboard, and even purflings. This is an

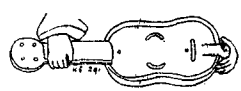


Fig. 186.

Hurdy-Gurdy in shape of guitar-fiddle, 14th cent. From Cathedral of Aix-la-Chapelle. Rühlmann, Taf. VII., No. 10.

instrument of the same type as Fig. 178, a French example a century earlier in date and much smaller.

When we reach the fifteenth century we find the guitar-fiddle in its most perfect shape and beautifully proportioned, but it does not follow that this perfection was not attained in Germany at a much earlier date.

Fig. 187 represents an instrument from a painting in the old Pinacothek at Munich by an anonymous master of the Cologne School of the fifteenth century, given also by Rühlmann (Atlas. Tafel VIII., Fig. 27).

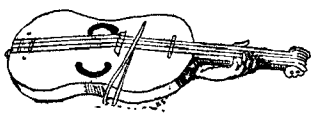


Fig. 187.

Guitar-fiddle, 15th cent. From the Pinacothek, Munich. Rühlmann, Taf. VIII., Fig. 27.

The body is large—it was probably the alto instrument—and shallow, having a neck furnished with a sort of reel head over which the strings are strained, the better to obtain the requisite tension.

The "C"-shaped sound-holes are correctly placed, but the bridge, as is so often the case, has proved a puzzle for the artist, who, not content with placing it above the sound-holes, has drawn a second one where the end of the fingerboard might show through under the strings; the bridge, it will be observed, has a groove for each of the strings. The tail-piece consists of two more bridges, over which the strings are strained, and of a tail-pin to which they are fastened. Unfortunately, only part of the bow has been preserved.

In Fig. 188 we draw upon Aix-la-Chapelle again for our illustration (Rühlmann, Taf. VIII., No. 12), where it is by a misprint attributed to the fourteenth century, which yields an instrument of a less perfect type than the last, but nevertheless a true guitar-fiddle, with at least one point in common with the Minnesinger fiddles shown in the last two articles, and that is the round head with pegs inserted in the under sur-

face instead of at the side, as in Fig. 187. Fig. 188 is from a painting on wood by the hand of the Dutch artist Hugo van der Goes, who flourished between 1467 and 1479, and travelled a great deal in Italy and Germany.

Such, then, is the best selection of minstrel fiddles from Germany which can at present be gathered together, all, with one or two exceptions, the result of Dr. Rühlmann's labour, independent research (which in one fortnight alone, included over sixty MSS. and facsimiles) having proved fruitless as regards Germany.

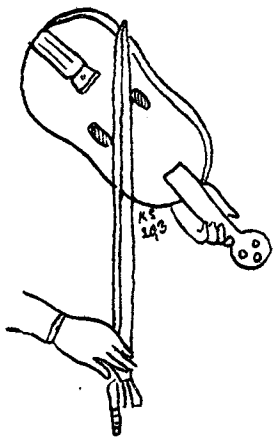


Fig. 188.

Guitar-fiddle, 15th cent. From a painting by Hugo van der Goes. Rühlmann, Taf. VIII., No. 12.

The Minnesingers never imitated the courtly, somewhat superficial style of the romantic troubadours of Southern France; those of lower Germany were influenced in a measure by the *trouvères* of Northern France by way of Burgundy, Flanders, and the Rhine country, but in the songs of the Minnesingers of upper Germany there is no trace of French style. The Minnelieder were always distinguished by a popular element and by the expression of a poetry which came from the heart, and was as much at home in the breast of a peasant woman as in that of a courtly dame. The beauty of the poetry was less dependent on expression, on fine language, and on romantic accessories than on pure feeling, distinctions which characterize German poetry at the present day in a still more striking degree.

THE GUITAR-FIDDLE IN SPAIN.

Researches in the region of Spain on the subject of the guitar-fiddle of the troubadours, considering the extreme difficulties in the way, have not proved altogether fruitless.

The earliest illumination we have of any bowed instrument in Spain is, I believe, that contained in Add. MS. 11695 at the British Museum, dating from the twelfth century. This manuscript is a version of the Apocalypse by an anonymous author, believed to be a Spaniard, with commentaries, from the monastery of Silos, near Burgos in Old Castile.

The minstrel, as he has been called in Shaw's "Ornaments of the Middle Ages," where a facsimile of the figure is given, holds the instruments with the head pointing towards his left shoulder and the tail end poised on his knee, he is represented in an attitude of dancing.

The miniatures in the manuscript are crude both in outline and colouring; red, yellow, green, and black predominate, and the faces throughout are of one type peculiar to the productions of that part of Spain, with large heavy black eyes and hair. The instrument in Fig. 189 is, if allowances be made for the licence of the artist, an oval vielle with five strings fastened to very long pegs in a T-shaped head, and at the other end to a crescent-shaped tailpiece; the neck was in a separate piece and joined to the body apparently (judging by the painting) by a sort of collar, which may in reality have indicated the end of the fingerboard, over which the artist has carried but one string to the neck, whereas there are five stretched over the body.

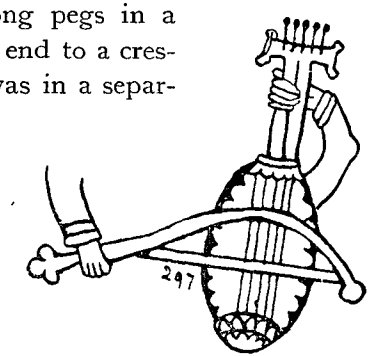


Fig. 189.
Oval vielle, or minstrel's fiddle, 12th cent., Spain. From Add. MS. 11695, Brit. Mus.

The bow is of the type with a long handle already seen in MSS. from other countries. The ornamentation on the vielle is singular, and will be mentioned again later on. There is in the MS. but one bowed instrument, whereas a similar instrument, with several small round

sound-holes and three strings, plucked with the fingers, occurs several times. Riaño, in his "Early Studies of Spanish Music" (p. 109), gives seven musicians from a MS. dated 1047, from the same source as Add. MS. 11695, one of which holds an instrument like the one in Fig. 189.

In M. le Comte de Bastard's matchless work (already described in these articles) with facsimiles of the principal illuminated MSS. in France, we find traces of the same art. In a version of the Apocalypse now in the Bibliothèque Nationale, Paris, we find the adoration of the twenty-four elders depicted in a miniature, and they hold practically the same instrument again, some with four and others with five strings, but no bows. The MS., written in the second half of the eleventh century, is derived from the Abbey of St. Sever, in Gascony, which was evidently in communication with the monastery in Burgos, judging from the great similarity in the drawing of the miniatures.

One would naturally turn with great expectations to the unique MS. from the Escorial, so often quoted in these articles, the "Cantigas de Santa Maria," where, among the fifty-one figures of musicians, however, there is not a single instance of the guitar-fiddle with incurvations; this is not a little remarkable, and perhaps some one better versed in the history of Spanish music might be able to suggest some explanation. The kithara or githara answering to al-Farabi's description, with fingerboard and frets and a body representing the kithara of the Greeks, is twice given, but the strings are plucked with the fingers. Oval vielles there are with fingerboards, and soundholes and tailpieces, but no incurvations. One of these is held like a fiddle, and the others like the violoncellos, merely resting on or between the knees, according to their size; this was apparently, however, not the sole cause of so holding the precursors of the violoncello, since in this and other manuscripts quite small instruments are rested on the knees, whereas

others, much larger, and one would think much too heavy to be so played with ease, rest under the chin like the violin. Curiously enough, in one of these oval vielles with fingerboard and diamond-shaped head held like Fig. 189, we find the same ornamentation as in the Burgos vielle. Alfonso the Wise, who caused the "Cantigas" to be compiled, or, as some say, wrote them himself, reigned over Castile and Leon, and presumably employed a native artist to paint the miniatures.

Fig. 190 is derived from the same century—the thirteenth—as the "Cantigas," and from the same province of Leon. It is from a painted window in the Cathedral of Leon, and has been copied from a very fine work by Don Juan de Dios Rada y Delgado, the "Museo Español de Antiguedados," vol. ii., p. 286.

Fig. 190.

Guitar-fiddle, 13th cent. Spain. From a painted window in the Cathedral at Leon. See "Mus. Esp. de Antiguedados," vol. ii., p. 286.

Here we have the instrument we sought for in vain in the "Cantigas"—the real guitar-fiddle—still, however, held on the knees, which appears to have been the favourite position in Spain. I may, *en passant*, remark that five out of the six bowed instruments in the "Cantigas" are so held.

In Fig. 190 we have an instrument with incurvations, ribs, a fingerboard, four strings, and a square tailpiece kept in place by strings fastened to a button; the head is somewhat indistinct; the sound-holes have been placed in the upper lobes by the artist; it is otherwise a thoroughly satisfactory example, equal in point of development to any of its contemporaries from other lands.

With this Spanish guitar-fiddle we must, owing to want of space, leave Spain for France, where available materials are richer and show a great variety in style.

THE GUITAR-FIDDLE IN FRANCE.

While the form of the Minnesingers' fiddles from Germany, such as Figs. 179 and 180, are still in our mind, we must consider what France can give us of the same type.

The long narrow fiddle with wide incurvations reproduced in Fig. 191 is the nearest I have yet seen to the German type we found common in the MSS. of the Minnesingers and of the Nibelungen Lied. This illustration is from a painted window of the thirteenth century in the Chapel of the Virgin in the

Fig. 191.
Fiddle, 13th cent., Troyes Cathedral. Lacroix, p. 218.

Troyes Cathedral, which is given by Lacroix in "The Arts of the Middle Ages," p. 218. The bridge, resting on very decided feet, must have been very high if anything like the painting. There are four strings tuned by pegs set in the back of a diamond-shaped head, which here replaces the round one common in the Minnesingers' fiddles; there are four pegs, the fifth dot being probably intended for the nut over which the longest string was strained. This fiddle, it will be observed, is held like the Spanish one in Fig. 190. The neck is formed by the

gradual narrowing of the body—one of the characteristics of the Minnesingers' fiddles.

We have no authority for thinking that this fiddle was a type of those in use among the minstrels of France, the royal personage here playing being rather intended for King David.

The elaborate and fanciful instrument in Fig. 192 is taken from one of the famous manuscript "Bibles Historiaux," of which there are so many in the Bibliothèque Royale, Paris. Willemin gives the numbers 6819 and 6703 from which he derives a page of illustrations without further specification; both manuscripts date from the fourteenth century. The position of the left hand and arm supporting the fiddle, and of the right hand on the bow, testify that the artist was not much of a connoisseur in fiddles, nor did he understand how they were played, he has made of the pegs an ornamentation for the head without regard for the fact that there are but three strings.

Fig. 192.

Guitar-fiddle, 14th cent., from a MS. Paris, Bibl. Nat. "Bible Historiaux."

Fig. 193 has the outline of a much elongated pear-shaped rebec, but apparently with ribs; it is here given on account of the interesting detail of the head which it gives us. Here we see the nut at the end of the neck over which the strings are strained as they leave the peg-box; there are five strings and five lateral pegs. Fig. 193 is from a sculpture given by Viollet-le-Duc in the "Dictionnaire Raisonné du Mobilier Français" under the head of "Vielle" in Vol. II.; it is one of the sculptured statues of kings on the western doorway in Notre Dame de Chartres, of which the date is 1140 A.D.

Fig. 194 is a genuine minstrel fiddle of the twelfth century from the Abbey of Vezelai, taken from the same source as Fig. 193. The instrument hangs by a ribbon at the side of the

minstrel, as we read was the custom in the verses of the Fabliaux of the thirteenth and fourteenth centuries. In outline it reminds us of the class of instruments which was the outcome of the

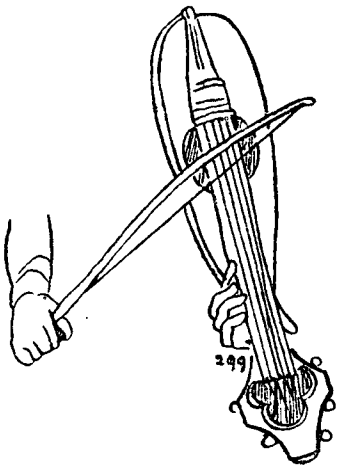


Fig. 193.
Vielle, 1140 A.D., Notre Dame de Chartres. See Viollet-le-Duc, Vol. II.

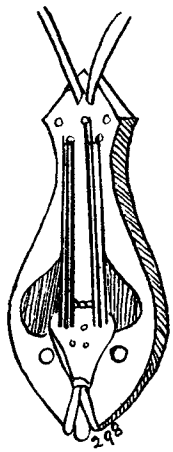


Fig. 194.
Minstrel fiddle, 12th cent., Abbey of Vezelai. See Viollet-le-Duc, Vol. II.

cithara before necks were added; the bridge is visible between the strings, the pegs are set Oriental fashion in the back of the head.

Belonging to the same category are the instruments given in Figs. 195 and 196. Fig. 195 is a bowed instrument from a painted window in the Cathedral of Bourges, given by Cahier et Martin in "Monographie de la Cathédrale de Bourges," Vol. II., Plate 23, and is of the thirteenth century; the head is fancifully drawn in *trefoil, enclosing the fleur-de-lys.* No finger-board is given, but that may be omission of the artist.

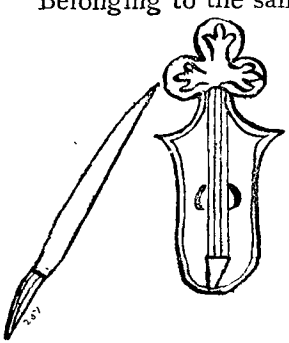


Fig. 195.
Fiddle, 13th cent., Cathedral of Bourges.

Fig. 196 very much resembles the

last in outline, tail-piece, &c., but with the addition of a finger-board and of a more practical head. The illustration is from Add. MS. 16975 in the British Museum, a Psalterium written at the close of the thirteenth or the beginning of the fourteenth century; the drawings are in tinted outline by a Norman artist, and the MS. belonged to the Abbey of Lire in Normandy; we may conclude that it was written there, for in the calendar are entered many obits of abbots and benefactors of the monastery, among them the Earl and Countess of Leicester.

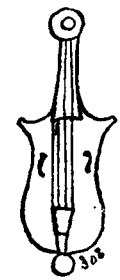


Fig. 196.
Guitar-fiddle, end of 13th cent. Add. MS. 16975, Brit. Mus.

Fig. 197 represents a minstrel from the Façade des Musiciens

Fig. 197.
Oval vielle, 13th cent., Façade des Musiciens, Rheims. See Viollet-le-Duc, Vol. II.

at Rheims, as given by Viollet-le-Duc. The statues are life size and date from the thirteenth century. The instrument has nothing special to distinguish it; it is merely an oval vielle, and has nothing in common with the guitar-fiddle; the bow is an iron one, and its slim, elegant shape with a handle is interesting.

A true guitar-fiddle is Fig. 198, without details, however; it is found on a painted window in the Abbey of Bon-Port, dating from the thirteenth century; the neck is in a separate piece, but is thick and rectangular. The bow is abnormally long.

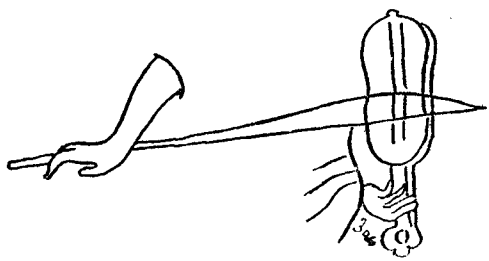


Fig. 198.
Guitar-fiddle, 13th cent., Abbey of Bon-Port.

The guitar-fiddle in Fig. 199 is taken from a very beautiful MS. of the thirteenth century in the Bibliothèque Impériale, No. 6769, "The Romance of the San Graal," and forms part of a scene representing the beautiful Josiane, disguised as a female juggler, playing a Welsh air on the guitar-fiddle to make herself known to her friend Bewis. The MS. is considered very precious; it was brought from "Pavye" by Louis XII. of France, who, it is believed, obtained it from the library of the Sforza family, one of the richest in Italy, when Louis XII. carried off its treasures to Blois.

Fig. 199.
Guitar-fiddle, 13th cent.
MS. No. 6769, Bibl. Imp. Paris.

The Romance is written by a Frenchman, Robert de Borron, and begins thus: "El comence (*sic*) Messire Robiers en tel manière com vous porés. S'il est qui le vous lie," an interesting allusion to the mediæval custom of reading prose romances aloud to amateurs. The illustration may be seen in full in Lacroix's work quoted above (p. 457). Here we have the instrument again held in a very insecure position; it is a genuine guitar-fiddle with five strings, the same number of pegs inserted laterally in the head. It is interesting to note from this example that it was customary for women of high degree to learn to play the fiddle even as early as the thirteenth century in France.

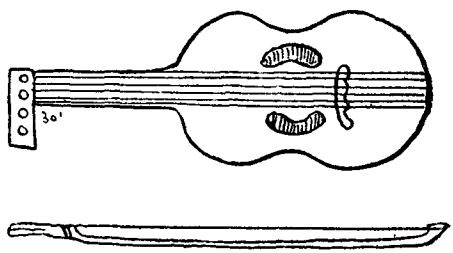


Fig. 200.
Guitar-fiddle, 14th cent. MS. No. 7378A, Bibl.-Imp. Paris.

Fig. 200 is a guitar-fiddle, slightly reminiscent of the last but with its head bent back in order to obtain a better tension for the strings, which, judging from the lines, number six, but from the pegs four—probably the correct number as there are also four notches in the bridge, the other two representing the fingerboard.

This illustration is given by Viollet-le-Duc, who derived it from a MS. No. 7378A, of the fourteenth century, in the Bibliothèque Impériale.

Fig. 201 shows yet another true guitar-fiddle from MS. 6737, of the fourteenth century in the Bibliothèque

Fig. 201. Guitar-fiddle, 14th cent., MS. 6737, Bibl. Imp., Paris. See Willemin.

Impériale, Paris, which contains three Romances by Benoit de Ste. Maure—"Le Roman de Thebes, le Roman de Troyes, et le Roman d'Eneas." The whole scene is given by Willemin in his beautiful volumes of "Monuments Inédits," and contains besides a tabor with a snare, a tambourine, a psaltery, a portative organ, and a cittern.

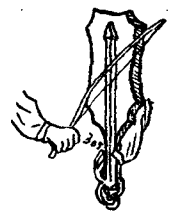


Fig. 202. Fiddle, 13th cent., from the Cathedral of Amiens. See Naumann's "History of Music," p. 257.

Before closing our study of the guitar-fiddle in France one more example is given, Fig. 202, to show that the idea of using some sort of corner block had already occurred to a fiddle-maker, although it did not come to perfection or become generally used until the day of the viol family dawned. The illustration is from a piece of sculpture in the Cathedral of Amiens, and may be seen in Naumann's "History of Music," first edition, p. 257. (See Appendix E).

THE GUITAR-FIDDLE IN ENGLAND AND ITALY.

In England, we find that the favourite stringed instruments of the minstrels were first of all the harp and crouth (rotta) and during the eleventh and twelfth centuries the pear-shaped rebec and gigue, all of which have already been illustrated in these pages. The citt'ern and gittern apparently superseded all others in popularity during the thirteenth and fourteenth centuries—this we deduce from the poems and miniatures by English artists which remain.

The precious manuscript known as Queen Mary's Psalter (British Museum, Reg. II. B. VII.) contains, perhaps, more musical instruments than any other manuscript, and more especially scenes of minstrelsy treated in every imaginable way by a very observant artist with a keen sense of humour. It seems strange

to us moderns to find the Book of Hours, Psalteries, and Breviaries with borders in which the broad comic humour of the artist is allowed to run riot; but no one examining these treasures of archæology will feel inclined to find fault with the taste of our forefathers.

In Queen Mary's Psalter the instruments do not vary very much; we find the vielle, the little minstrel harp, the psaltery, the small portative organ with eight notes, the long straight trumpet, the shawm, the pipe and tabor, tambourines, the oliphant both large and small, the bagpipes; of all the instruments the two that recur most constantly are (1) the oval vielle, with fingerboard, tail-piece, small sound-holes placed close together, a leaf-shaped head, and a long bow, of which half the length is handle; (2) the cittern, already given in Fig. 167, the outline of which is sufficient, even without the name of the instrument, to point conclusively to its descent from the kithara of the Greeks and Romans. This instrument, as we see from one of the miniatures, has ribs connecting the flat back and sound-board, but the strings are vibrated with a plectrum and not a bow.

A bowed instrument of almost identical shape, but with the change in the sound-holes necessitated by the difference in the method of vibrating the strings, is to be found on a sculptured pillar in the cathedral of Aix-la-Chapelle.

The unique MS. of which we were speaking is the work of an English artist of the beginning of the fourteenth century. The miniatures which adorn every page are throughout of the same character; the first part, the Old Testament in pictures with short explanatory text in French, and the border grotesques illustrating animal and bird life as well as social English life, without any regard to the sacred text written above, are in tinted outline, the favourite colours being green, mauve, and light red (terra cotta), whereas the Psalter itself is independently illustrated by paintings.

Fig. 203.

Guitar-fiddle, 14th cent. Chas. Wild's "Architecture and Sculpture of Lincoln Cathedral."

Fig. 203 is given by Chas. Wild in his book of "Illustrations of the Architecture and Sculpture of Lincoln Cathedral" (London, 1815), to which he assigns the dates 1251 to 1306. The instrument seems to belong to a much later date from the shape of the incurvations; it may have been restored.

A more thorough study of the musical instruments used in England before the great wave of Italian influence set in would, I imagine, bring us very little evidence that the true guitar-fiddle was ever a favourite in this country.

Italy must now engage our attention, and with it these studies will close. The land of the Cremona masterpieces was already, in the thirteenth century, rich in great painters, who have left us illustrations of the very instruments for which we are now seeking.

Fig. 204 represents a guitar-fiddle from a painting by Andrea Tafi, of the school of Florence (1213-1294), who was a pupil of Apollonius, a Greek painter established in Venice.

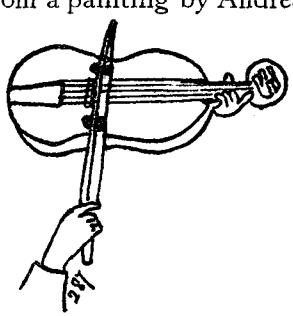


Fig. 204.

Guitar-fiddle, Italian, 13th cent., from a picture by Andrea Tafi (see Rühlmann.)

Tafi was the first, it is said, to introduce into his pictures figures of angels playing fiddles. This illustration was taken by Rühlmann from Artaud de Montor's "Peintres Primitifs," Paris, 1843.

The incurvation is but a wave in the general outline, but the fiddle is

well proportioned, and the bow is by no means a clumsy one.

Fig. 205 is from a picture by Cimabue in the Pitti Gallery, Florence. This early Florentine artist, born in 1240 and still living in 1302, also had Greek masters, and was, as is well known, the founder of the Italian school, and the master of Giotto.

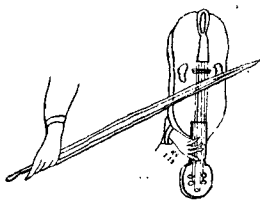


Fig. 205.

Guitar-fiddle, Italian, 13th cent., from a picture by Cimabue in Pitti Gallery, Florence.

We are indebted to him for having recorded the guitar-fiddle here shown, in which the outline is again wavy. The finger-board has been clearly drawn, and also the tail-piece, which, like the modern one, is wedge-shaped, and is slung by a gut string to a button; the sound-holes are ear-shaped, and the head large and oval. The positions of the hands stopping the strings and holding the bow are remarkable.

The four-stringed guitar-fiddle given in Fig. 206 is from a wall painting in the Spanish Chapel of S. Maria Novella, Florence, ascribed to Simone Memi (see Springer, Part II.). The instrument is of a very large size, and was probably the alto guitar-fiddle, corresponding to our viola. The finger-board stands out well in the picture; the neck finishes off with an oval head vaulted at the back. The six sound-holes are curious—four being diamond-shaped, and two like crescents. The bow is modern looking, forming a great contrast to that in Fig. 204, from a picture by Andrea Tafi, and the century which lies between the two illustrations hardly seems enough to account for the development.

Fig. 206

Guitar-fiddle, 14th cent., from a picture ascribed to Simone Memi, S. Maria Novella, Florence.

Fig. 207 is taken from the celebrated "Triumph of Death"

by Orcagna, painted in the middle of the fourteenth century in the Campo Santo at Pisa. This illustration is borrowed from Rühlmann's book before quoted (Taf. VIII., No. 5). Andrea and Bernardo Orcagna were engaged in collaboration in the Campo Santo in two large frescoes, "Paradise" and the "Inferno," illustrating Dante's immortal conception. Andrea repeated these later in the Church of Santa Croce at Florence, placing among the elect portraits of his benefactors, and in the "Inferno" those of his enemies.

We only see the back of the instrument, which was ornamented, thus we cannot judge of the details. There seem to be six pegs in the head. In outline the instrument resembles one in a MS. in the British Museum, Nero C. IV., by an Anglo-Norman artist of the twelfth century, having two lobes, between which the bout (if we may call it thus) is straight; the purflings are distinctly shown.

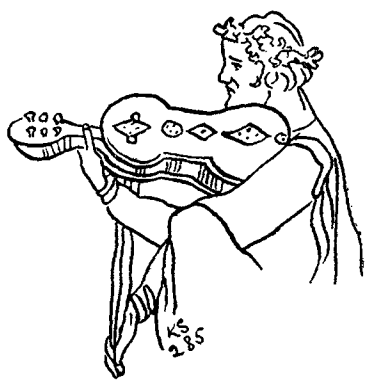


Fig. 207.
Guitar-fiddle, 14th cent., Italy, "Triumph of Death," by Orcagna, Pisa. Rühlmann, Pl. VIII. (5).

In the fifteenth century, although we still find numbers of guitar-fiddles in Italy, the viol characteristics were beginning to show themselves, and corner blocks, single and double, are observable, giving to the viols various curious shapes, which, however, leave the guitar-fiddle with its wavy incurvation behind altogether to die a natural and gradual death.

Several of these bowed instruments with corner blocks, of which the outline seems to have been derived from the oval vielle, giving a body with sloping shoulders and a tail-end to match, with the straight bouts above described, a finger-board

with frets, "C"-shaped sound-holes, and a scroll terminating the head, will be found in one of the most precious and beautiful manuscripts of the British Museum, known as the Sforza Book.

This work of art dates from the end of the fifteenth century, and was only acquired in 1893, having been presented by Mr. J. Malcolm, of Poltalloch. A facsimile in collotype of some of the miniatures and borders, with an introduction by G. F. Warner, M.A., has been issued by the British Museum. (See Bibliography, Section E.)

The MS. was written for Bona of Savoy, Duchess of Milan, wife of Galeazzo Maria Sforza, second Duke of Milan, between the years 1476 and 1480, it is thought. After the death of Bona in 1503, her daughter Bianca Maria inherited the treasure, and it passed successively into the hands of the Emperor Maximilian, her husband, and of Charles V., after which it cannot be traced again until it was purchased in 1871 at Madrid. This exquisite work of art contains no less than sixty-four full-page miniatures and 139 illuminated borders, in which musical instruments of every kind abound. These miniatures are by three different hands, one of which was Flemish, and the other two representative of the very best Milanese illuminators; the painting of the latter is distinguished by extreme richness and brilliancy of colouring, the colours, reds and browns more especially, being heightened by the use of gold paint, which is never burnished; the colouring of the Flemish miniatures is softer, the conception and design are simpler, and the backgrounds are especially lovely.

Amongst the musical instruments are the early viols above mentioned, of which there are several examples—gigues, lutes, an oval vielle with long fretted neck, and a long bow of which half the length is handle, a trumpet bent into "S" shape, harps, psalteries, a lyre, a portable organ played by two angels, double

Plate XIII.

Archetype of the Lute and Rebab. 1000 B.C. Greek Post-Mycenæan Period. Found in the Cemetery of Goshen, 1906. XXth Dynasty. Reproduced through the Courtesy of Prof. Flinders Petrie (Brit. School of Arch. in Egypt).

From a photograph by Robert C. Murray.

and single pipes, platerspiels, the hurdy-gurdy, cymbals, pipe and tabor.

Fresh evidence afforded by the great wealth of archæological material of every description published during the last few years, since the original studies were written, and which has therefore been only partially investigated while these pages were going through the press, comes as a confirmation of the theory of the evolution of the violin family set forth in this collection of studies. A wide field for independent research has been opened out, in which others, and notably Edward Buhle* are earnestly working. The explorations now being carried out in the East, of which the results are published year by year, show us that we are but on the threshold. We still have almost everything to learn concerning the archetypes of European instruments in the East, and the manner in which they were made known to the nations of the West. This is emphasized by Prof. Flinders Petrie's discovery of a little terra-cotta figure, Greek work of the Post-Mycenæan period, found in Egypt during the excavations of 1905-6† in a grave in the Goshen cemetery,‡ and reproduced from a photograph obtained through the courtesy of Professor Flinders Petrie (see Pl. XIII.). The squat instrument, ornamented in characteristic Mycenæan style, bears no resemblance to any of the types of Egyptian instruments known to us, all of which have long necks; it is on the contrary reminiscent of the early Persian rebab, of which it may have been the archetype. The

* "Die Musikalischen Instrumente in den Miniaturen des frühen Mittelalters. Ein Beitrag Zur Geschichte der Musikinstrumente. I. Die Blasinstrumente." Von Edward Buhle, mit Text figuren und 14 Tafeln Leipzig, Breitkopf and Härtel, 1903.

† Excavations carried out by the British School of Archæology in Egypt and Egyptian Research Account.

‡ See "Hyksos and Israelite Cities," by W. M. Flinders Petrie and J. Garrow Duncan, 1906. Brit. School of Archæology (double volume)

date assigned to the statuette is the XXth dynasty, circâ 1000 B.C.; it is therefore the oldest non-Egyptian representation of a stringed instrument yet found; and doubly valuable from being not flat but modelled.

The great aim of these studies was to trace the History of the Violin from the highest antiquity to the day of the viols, its immediate precursors; this has now been done, and, according to the writer's opinion, the violin was directly descended in body as well as in name from the kithara of the Greeks through the guitar, which latter, at a time when the rest of the world was still plunged in barbarism, had already been evolved in ancient Egypt, where it had reached as great a state of development as during the fourteenth century in Europe.

APPENDIX (A).

The Barbiton.

AUTHENTIC information concerning this instrument (see p. 313) is meagre in the extreme; I believe, however, that in the instrument given in Figs. 24 and 108 we may identify the barbiton as it was known among the Greeks and Romans in the period immediately preceding and following the birth of Christ. From the Greek classics* we gather that the barbiton possessed features in common with the lyre—probably the vaulted back, the seven or eight strings and the manner of plucking them and that it was a bass instrument—from Persian and Arab sources that it was a kind of rebab or lute or a chelys lyre.† All of which agrees substantially with the barbiton of Fig. 108.‡ The barbiton penetrated into Europe from

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* See Quotations and References, p. 313.

† Johnson's Persian-Arabic-English Dictionary. PERSIAN *barbat*—a harp or lute; *barbatzan*, player upon lute; *barbat-nawaz*, lutenist. ARABIC barbat plural barabit. G. W. Freytag. Lexicon Arabigo-Latinum, Tom. I, p. 102. PERSIAN and ARABIC, *Barbat*—Barbitus genus testitudinis plerumque sex septum ve chordus instructum (Rotundam habet formam in Africa). Tom. iv., p 433 chelys—barbiton. (Jac. Schult.)

‡ The deep shadows thrown by the figure conceal in the reproduction the slight shoulders of the instrument. Other illustrations of the barbiton from sculptures are to be found in M. G. Zimmermann, "Sizilien" (Berühmte Kunststaetten, No. 24), p. 98, from a photograph. The Agrigente Sarco-

Asia Minor by way of Greece and was later introduced in a somewhat modified form by the Moors into Spain, where, in the 14th century* it was known as *al-barbet.* At some period not yet determined during the Middle Ages, the *barbat* or *barbut* approximated to the form of a large lute, for in the early part of the 17th century, a kind of theorbo or bass lute, with neck bent at right angles to form the head, is described and illustrated under the name of *barbiton* by Robert Fludd.† It had nine courses of strings in pairs of unisons. G. B. Doni‡ mentions the barbiton, defining it in his index as "Barbitos seu major chelys italice Tiorba," deriving it from lyre and cithara in common with the *testudines, tiorbas* and all tortoise shell instruments. Until the end, the barbiton retained the characteristics of the instruments of the lyre and cithara families, whose strings were plucked, whereas those of the rebab were vibrated by the friction of the bow. The large pear-shaped rebab and the lute were practically one and the same instrument before the application of the bow to the former, which probably took place in the 7th century. The Persian word *Barbud* applied to the barbiton is derived according to modern

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phagus of which a caste is preserved in the Sepulchral Basement at the British Museum. See also Dom. lo Faso Pietra Santa. Le Antichita della Sicilia. Palermo, 1834.

Zoega "Antike Bas-Relieven Rom's" Gressin 1812. Atlas pl. 98, Sarcophagus representing the story of Hippolytus and Phaedra. "Clarac" MuséedeSculpture, Paris, 1826-51. Planches Tom. II., Pl. 202., No. 261, also P. Bouillon, Musée des Antiquités, Paris, Tom. III., Pl. 24.

* Enumeration of Arab Musical Instruments known in Spain, XIVth cent. Treatise of Music by Mahamud. Ibrain Axalihi MS. 69, Escorial. See R. S. Kiesewetter. Die Music der Araber., Leipzig 1842, p. 91. In the MS. Cantigas de Santa Maria, to which reference has frequently been made, there are three musician playing upon large bass lutes.

† "Historia Utriusque Cosmi," Roberto de Fluctibus, Oppenheim, 1617. Tom. I., Tract II., Part II., Lib. VI. Cap. 1, p. 226.

‡ G. B. Doni, "Lyra Barberina." Florence, 1763, Vol. 1., p. 29 and Vol. II., Index.

Persian sources* from the name of a famous musician living at the time of Khosroo Parviz (6th century A.D.) who excelled in playing upon the instrument—a kind of rebab apparently to which the Arabs afterwards gave his name. I give the story for what it is worth not knowing what authority the Persian writer had for his statement. If the Greek barbiton was obtained from Persia by way of Asia Minor, however, as the derivation of the name would seem to suggest, the name barbat, barbut, must be many centuries older than the time of Khosroo Parviz. The barbiton was a bass instrument (see *ante* p. 313, Pollux and Athenæus), and therefore the ancestor of the bass lute or *Theorbo*.

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* The Seven Seas, A Dictionary and Grammar of the Persian Language, by H. M. Abul Masaffer Muiseddin Schah Seman Ghasieddin Haider Padischah. *Ghasi* (the name under which he is indexed), King of Oude, in seven parts, Lucknow, 1822. This book has not, I think, been translated. Only the title being in English, but a review with copious quotations by von Hammer-Purgstall is given in Jahrbücher der Literatur, Vienna, 1826, Bd. 35 and 36. Names of Mus. Insts., Vol. 36, p. 292 *et seq.* Also Kiesewetter, *op cit*, p. 9.

See also Fr. Rückert "Grammatik, Poetik, u. Rhetorik der Perser," nach dem 7ten. Bande des Heft, *Kolzum*, Gotha, 1874, p. 80 (the introduction to the "Seven Seas."). "Die Sänger stehen bei seinem Gastmahl, in ihrer Hand *Barbiton* und Leyer und Laute und Flöte und Deff." In the original Persian, barbiton is rendered *Barbut*, an interesting and valuable point ascertained through the courteous assistance of Mr. A G. Ellis, M.A., of the Oriental Department, British Museum.

APPENDIX (B).

The Persian Rebab.

The rebab was, as far as we know, the means through which the bow was introduced into Europe; that is to say it is the first instrument we find associated with the bow in the earliest pictorial or sculptural monuments of European art. It will not, therefore, be out of place to summarise briefly the discoveries made by the author while the book was in the Press and to point out the extent to which they modify the conclusions arrived at therein. In the chapter on the "Influence of the Moors on the Stringed Instruments of Europe" it is stated that the Arabs declare they obtained the rebab from the Persians in the 7th century A.D. [pp. 383-420 and p. 405]. No representation of the ancient instrument from Arab or Persian sources had up to the present time been forthcoming. This statement is now substantiated by a series of representations of instruments of Asiatic origin ranging from 1000 B.C. to the 9th century A.D.

Stringed instruments having a body shaped like a longitudinal section of a pear, more or less elongated, are of Asiatic origin; the actual pear-shaped instrument found by Mr. Maddox at Thebes (Fig. 101, p. 406) appears to be quite an isolated instance in ancient Egypt for it does not occur in representations of musical scenes in sculpture or fresco. The characteristic construction of the pear-shaped instrument with vaulted back and flat soundboard glued together without ribs or sides, was followed with certain variations in outline and in the minor features in a number of instruments which received

different names among the races of Asia: we have no clue to the name of the archetype. *El-Oud* (the lute) of the Arabs and the pear-shaped rebab were practically one and the same instrument until the advent of the bow, which had probably been made known to the Arabs by the Persians, since the Arab word for bow is derived from the Persian. The Arabs learnt to know the lute and probably at the same time the rebab, from the Persians at the end of the 6th century, when one of their musicians named Nadr-Ben el Hares Ben Kelde was sent to Khosroo Parviz to learn to sing and to play the lute; through him the lute was brought to Mecca. In Plate XIII., which represents a little terra-cotta figure of a musician playing on a pear-shaped instrument, we see what may be the archetype of the rebab or lute family. The terra-cotta figure discovered in Egypt by Professor Flinders Petrie (1905-6) during the course of excavations in the cemetery of Goshen, is Greek work of the Post-Mycenæan age; it was found in surroundings assigned to the XXth Dynasty (cir. B.C. 1000) and shows the earliest pear-shaped instrument yet discovered. Plate XII. shows two statuettes of musicians (to the left) playing upon ancient Persian rebabs; the terra-cotta figures were excavated from the Tell at Suza, and date from the 8th cent. B.C. The instruments may be compared with some of the mediæval rebabs or rebecs illustrating Chapter IX. These figures clearly establish the origin of the instruments by some named *Lyra*,* by others (including the present writer) *rebabs* or *rebecs*, which were common all over Western Europe from the 9th century (see Fig. 15, p. 234, and Fig. 41, p. 260).

If this ancient Persian rebab or *rubâb* was the ancestor of the Moorish boat-shaped or elongated pear-shaped rebab (see Figs. 144, 153, 154, etc.), the instrument shown on the Sassanian

* See Laurent Grillet, "Les Ancêtres du Violon," etc. Paris, 1901, Tom. 1, p 29. Portail occidental de l'Église de Moissac (Tarn et Garonne.) XII. siècle.

silver dish (British Museum) on Plate XI. is no less certainly the ancestor of the lute, as well as of the bowed instruments common in the 12th century, such as Fig. 128 and Figs. 6 and 7. Instruments of this type appear on several other Sassanian works of art of the same period (see pp. 407-8). The central seated figure on Plate XI. is holding in the right hand an object which might well pass for one of the ancient Persian rebabs shown on Plate XII. Mr. Dalton, in his description of the dish,* suggests that the object resembles a *fly-flap*. The personage holds a wine cup in the other hand and could certainly not play the instrument with one hand only, but the cup may have been handed to him by the attendant who stands at his left with hands crossed over the breast. We may imagine he would resume his performance after having refreshed himself. This, however, is only surmise, and needs corroboration or confirmation by further discoveries of the instrument at the same period in less ambiguous circumstances. Excavations carried out in ancient Khotan or Ilchi (Turkestan) by the Indian Government† have brought to light fresh evidences of rebabs both pear and spoon-shaped on terra-cotta figures referred to the 8th century (circâ). They are in the style of the Gandhāra school (India). Here we find the spoon-shaped instrument with very short neck and large round head so familiar in European mediæval sculptures of the 11th and 12th centuries, such as the instrument in the top left hand corner of Plate IV., of which it is a replica, the bow excepted; the pear-shaped rebab with very long neck as in the instrument represented on the

* Ormonde M. Dalton. The Treasures of the Oxus. Catalogue of the Franks' Bequest to the British Museum. London, 1905, Pl. XXVI. No. 190.

† See Ancient Khotan, a detailed report of Archæological Explorations in Chinese Turkestan carried out by H.M. Indian Government, by Marc Aurel Stein. Oxford, Clarendon Press, 1907. Vol. II., Pl. XLVI., Nos. Yoo11, d., Yoo9, i., Pl. XLIII., Yoo28 and XLVII., Yoo11, d.

Sassanian Dish (Plate XI.) but with the addition of two lateral soundholes. The same instrument occurs among decorative *motifs* in the paintings of the Buddhist cave-temples of Ajanta (Khandesh, India)* assigned to the 6th century A.D. A later example at the British Museum, an engraved plate found at Ray in N. Persia (destroyed by Chinghis Khan in the 13th cent.) shows a woman holding the pear-shaped instrument with the long neck, and four strings twanged by the fingers. In all these examples the strings are plucked, but there is an ivory casket of Italo-Byzantine work, of the 8th or 9th cent. (similar in style to the *Veroli* casket at the South Kensington Museum) belonging to the Carrand Collection in Florence (see p. 408), on which is represented a pear-shaped instrument played with a bow. As, therefore, instruments of the same type as the rebab were at first twanged with the fingers, it is clear that the bow was not invented for the rebab, but only applied to it as it became known, all arguments in favour of including the rebab among the ancestors of the violin because the bow was used with it, fall to the ground. Instruments of a great variety of types and forms might equally claim the privilege of this ancestry without having, any more than the rebab, any single structural feature in common with the violin. It is evident therefore that the types of rebabs with which we are well acquainted from their frequent recurrence in MSS. and on monuments of Western Europe from the 8th century had their origin in the East, and were widely distributed over Asia Minor, India and Persia long before the 6th cent. A.D.

* By John Griffiths. London, 1896, Vol. II., Pl. 105, Cave. I., 19, e.

APPENDIX (C).

The Rebab in the Psalterium of Labeo Notker. (Fig. 149, p. 401 and Plate IV.)

Through the courtesy of Dr. Füh, the Director of the Library of St. Gallen, I find that the instrument reproduced by Hyacinth Abele in his book "Die Violine, ihre Geschichte und ihr Bau," Fig. 7, is not anywhere contained in the MS. to which it is referred, *i.e.*, the Psalterium of Labeo Notker, 10th cent. Abele's* description and illustration apply, in fact, not to the spoon-shaped rebab in the top left-hand corner of Plate IV., but to a similar miniature in the Psalter of Notker, MS. 774 (fol. 30), preserved in the Library of the University of Leipzig. The whereabouts of the MS. are not given by Abele and as the Notker Psalter in the Library of St. Gallen is the better known, the omission may give rise to certain misconceptions.

APPENDIX (D).

The Crwth.

By a curious process of reasoning certain writers on music and musical instruments persist in claiming for Wales or Brittany the honour of the invention of the bow, on the strength

* An English translation of Hyacinth Abele's work, "The Violin, its History and Construction, together with a list of Italian and Tyrolese Violin Makers," by John Broadhouse has now been published. William Reeves, 1907.

of the lines written by Venantius Fortunatus,* Bishop of Poictiers, in the second half of the 6th cent. (see p. 34).

"Romanusque, lyra, plaudat tibi, Barbarus harpa,
Græcus achilliaca, Chrotta Britanna canat."

Nothing is known of the use of a bow with the crwth before the 11th century, but it is nevertheless *assumed* without the slightest authority by these writers that the crwth had always been played with a bow,† whereas the very construction of the instrument, to which every facility for using the bow has been denied (such as incurvations, arched bridge), militates against this hypothesis, moreover, the word Britanna here probably denotes not Wales but Brittany in France. The earliest instance of the rectangular crwth, so-called, of Wales, with slightly vaulted back and ribs, as it has survived from the 18th century in a specimen preserved at the South Kensington Museum, is the representation of the instrument on an old seal of the 14th century brought to light by Mr. Edward Heron-Allen. The seal in question belonged to *Roger Wade, Crowder*‡ bears the date 1316. It is attached to a defeasance of a bond between the crowd-player and Warren de l'Isle, his debtor, and the document is preserved in the muniment room at Berkeley Castle, where Edward II. was murdered in 1327.

The representation of the instrument we regard as the Welsh crwth, on the seal of a "crowder" or crowd-player would seem to show that there was at that period no structural difference between the English instrument known as crowd and the Welsh crwth: that the instrument, in fact, was not peculiar to Wales.

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* See "Poemata," lib. VII., cap. 8, p. 245 in Migne's Patrologiæ Cursus Completus. Tome 88. Paris, 1857-66.

† See for instance Laurent Grillet, "Les Ancêtres du Violon." Paris 1901. Tome I., p. xv., xvi., xvii. and xviii., and p. 11. Grove's Dictionary of Music and Musicians, 1904. Article *Crwth*. Hugo Riemann's Lexicon Leipzig, 1905. Article *Chrotta*.

‡ See De Fidiculis Opuscula VIII. "The Seal of Roger Wade." London, 1895. With illustrations.

Roger Wade's crwth was similar in outline to the 18th century instrument pictured by Edward Jones (Fig. 33), but there were in the 14th century crowd only four strings; the left foot of the bridge does not appear to pass through the "C" sound hole in order to rest on the inside of the back and the bridge is flat. The bow is very short and one wonders how it was possible with it to set any single string in vibration—for there were no incurvations—they must have sounded together in a rude harmony of fourths, fifths and octaves. As evidence that the crwth was not always played with the bow, we have the instrument occurring in two Carlovingian MSS. (see Fig. 115, p. 337) the Bible of Charles le Chauve* and the other Bible transcribed for the same king, known as the Bible of St. Paul.† The crwth is being played by one of King David's musicians who is stopping the strings with the left hand and plucking them with the right. This crwth is a *rotta* with fingerboard added; the reader is invited to compare it with the oldest known rotta, the Asiatic instrument (1700 B.C.) shown in Fig. 77 (p. 286) the prototype of the crwth (which only needs the addition of a fingerboard to transform it into the semblance of a Welsh crwth of the 14th cent.) and also with the Anglo-Saxon rottas in Figs. 112 and 113 and the ancient German rotta of Fig. 168.

The Welsh crwth, in fact, until the time when the bow was applied to it, probably during the 11th century, was a rotta and was known in England by that name during the 8th cent. (see p. 335) and in Ireland as *crot* or *cruit*. It was, moreover, also known in France and Germany. In Irish MSS. of the 8th and 9th centuries, *cithara* is always glossed by *crot*. The

* See Comte Auguste de Bastard. Peintures et ornements de la Bible de Charles le Chauve . . . also Willemin, "Monuments Inédits" (plates not numbered).

† The Bible of the Monastery of St. Paul, near Rome. See fac-simile in photographs by S. O. Westwood, London, 1876.

Anglo-Saxons began to gloss *cithara* by *hearpan* in the 11th century, and this is probably why later writers have given *harp* as the equivalent for *cruit* from analogy. The well-known 9th century Cotton MS., Vitellius. F. XI. (Brit. Mus.) has a miniature of King David showing the cruit or rotta of that period, slightly caricatured, no doubt, to suit the grotesque character of the miniature. The Welsh crwth was therefore obviously not an exclusively Welsh instrument, but only a late 18th century survival in Wales of an archaic instrument once generally popular in Europe, but long since obsolete.

APPENDIX (E).

The Fiddle in Fig. 202.

The origin of instruments having, like those represented in Figs. 202 and 138, a soundchest of which the outline is based upon a rectangle, a varying number of strings either plucked by fingers or bowed, has until now been purely hypothetical. An illustration in a recent publication* representing a bear playing on a rectangular cittern with the tail-end corners cut off, solves the question. The fine volume of plates consists of coloured reproductions of some remarkable frescoes by a Greek artist from the palace built at *Kuseyr 'Amra* either for Khalif Walid II., of the Omayyad Dynasty (A.D. 744) or for Prince Ahmed the Abbāside (862-866). We may conclude that the instruments similar in outline which are to be found in later mediæval European MSS. and sculpture are not mere freaks due to Western European initiative but were derived from

* *Kuseyr 'Amra*, a publication issued by the Kaiserliche Akademie der Wissenschaften, Vienna, 1907, Vol. II., Pl. XXXIV. On the same plate is a transverse flute.

Eastern models. The earliest* of these European instruments dates from the 10th cent. Other examples are to be found in Du Sommerard's Les Arts au Moyen-âge, *Atlas*, Ch. XI., Pl. IV., 15th century, a carved wooden and gilded Triptych in gothic Italian style and in the *Album*, 6th Series, Pl. XXXV., a painting offered in 1518 to the Cathedral at Amiens. In these the corners are variously treated but both instruments are based upon a rectangle. In the *Album*, Series 7, Pl. XXXVII., is a bowed instrument long and narrow, with incurvations and a bow, represented on a 16th century faïence in relief by Bernard Palissy or one of his school. Numerous other examples will be found in the works of the Italian masters of the 15th and 16th centuries.

* Stuttgart Psalter (said to be French work) 10th cent.; reproductions in Trachten des Christlichen Mittelalters by J. von Hefner-Alteneck Frankfurt-am-Main, 1840-1854.

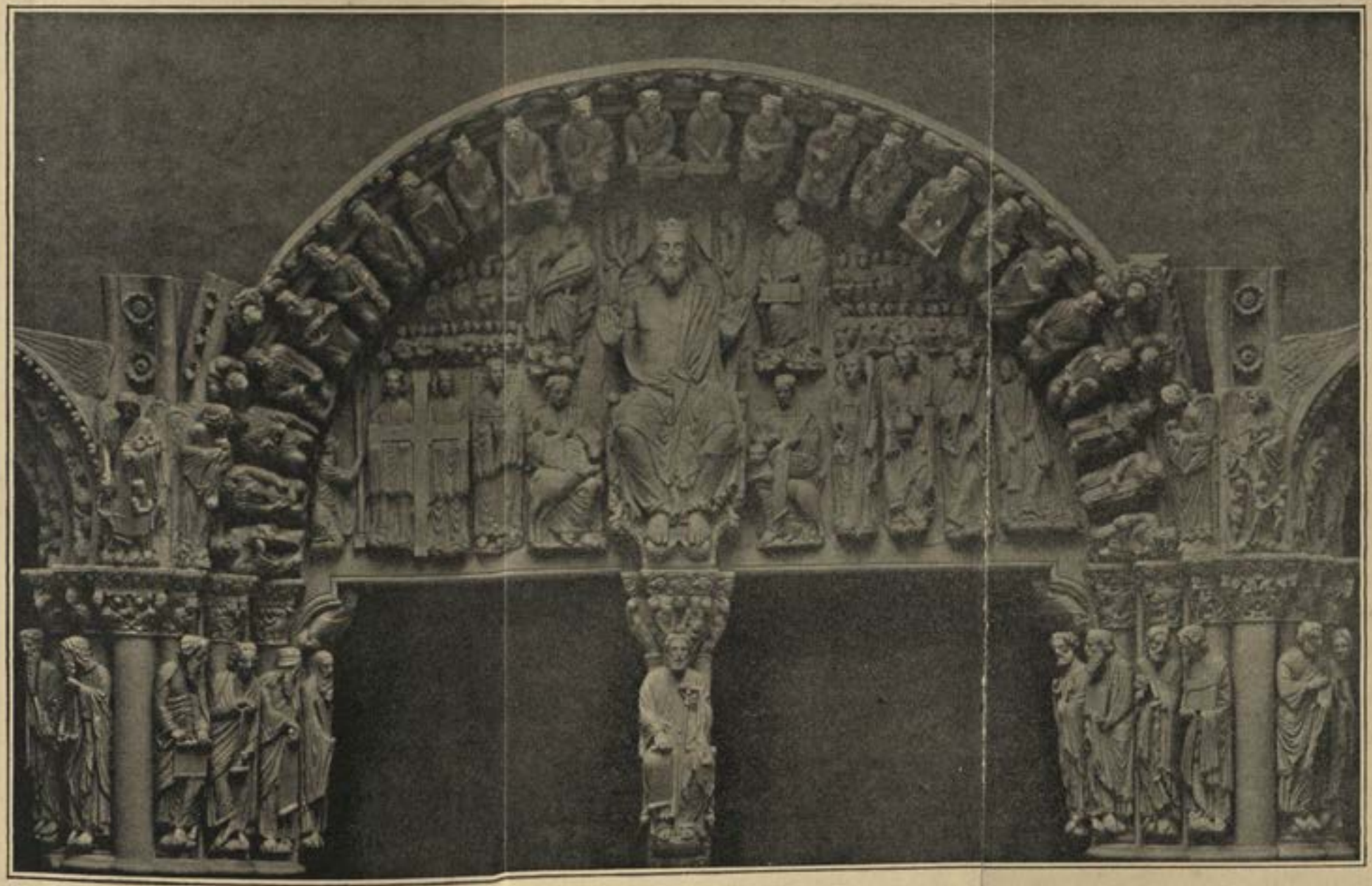

Plate XIV.

Mediæval Orchestra, XIIth Century. From the Cathedral of Santiago di Compostella. From the Cast at South Kensington Museum.

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(1). General works on Music, historical and critical.
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* To which are added a few suggestive references discovered too late to be of use to the author.

Asterisks denote special value to the subject treated herein, of either the text or illustrations.

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SECTION E.

PART I.

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PART IV.

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PART IX.

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ADDENDA ET CORRIGENDA TO VOL. I.

HORN. Pages 51-3. It is necessary to remember that in the French horn, owing to the narrow bore, in proportion to the length of tube, the fundamental notes are ineffective and the practical compass commences with the second harmonic. The notation, when the bass clef is used, is generally an octave below the real sounds. The French horn is the result of the fusion, during the Middle Ages, of the busine and bugle horns, respectively descendants of the Roman *buccina* and *cornu*. Many writers affirm that the French horn assumed its present form in coils in Paris at the end of the XVIIth century, but I have discovered in an early woodcut, a horn coiled three times round the performer's body (see Virgil, Opera, Strassburg, 1502, Pl. CCCVIII.) The whole question of the history of the horn has been treated at some length under the heading HORN in the eleventh edition of the "Encyclopædia Britannica" now in the Press.

GITHARA. Page 108, line 17. It is extremely doubtful that the early mediæval Moorish *githara* possessed any important structural features in common with those of the European guitar. There is, in fact, no trace among the Arab instruments known to us of any instrument resembling the guitar; the *cuitra* or *guithara* of the modern Arabs is a pear-shaped instrument with vaulted back, a long neck and strings twanged by means of a quill, belonging, therefore, to a different type altogether.

KETTLEDRUM. Page 161, line 17. It is now known that the Romans, and probably also the classic Greeks, were acquainted with the kettle-drum. The earliest European representation of the instrument occurs in a fine early Christian illuminated MS. known as the Vienna Genesis (about Vth century A.D.), in a banquet scene. See "Die Wiener Genesis," edited by Franz Wickhoff, Bibliography, page 574.

Page 20, lines 9-10. Instead of *an octave lower* read "two octaves lower."

Page 33, line 31. Between *Johann* and *Denner* insert "Christoph."

Page 40, line 6*. Instead of *Greser* read "Grenser."

Page 45, lines 13-14. Read "sounds of the E flat bass being an octave and a sixth lower, and those of the B flat contrabass saxophone two octaves and one tone lower than the written notes."

Page 48. Under illustration, instead of *Roux* read "Raoux."

* Lines having the number accompanied by an asterisk are counted from the bottom of the page.

Page 53, line 3*. After *Germany* insert "(Hamburg, 1705.)"
Page 58, line 5. Instead of *are really* read "were originally."
Page 58, line 12. After *mouthpiece* insert "and bore."
Page 58, line 22. After *instrument* insert "now."
Page 60, line 10. Instead of *all the valves* read "all four valves"; and for *B flat* read "B natural."
Page 68, line 7. Before *Compass* insert "Practical" and after *E flat* delete "or F." Under both musical examples of compass delete "8va bassa" and "loco."
Page 68, line 9. Read "in B flat."
Page 71. In the harmonic series of the F bass *as sounded* the B flat should be within brackets.
Page 97, line 1. Instead of *Victory* read "Enharmonic."
Page 105, line 6. Instead of *it* read "them."
Page 106, line 5*. Instead of *aments* read "laments."
Page 109, line 7. Instead of *6th to 8th cent.* read "6th to 9th cent."
Page 110, line 5*. Before *peculiarly* delete "a."
Page 113, line 12. For *treble or C clef* read "treble or G clef" and over musical example add "4" over the C string.
Page 120. Over musical example read "contrabassi."
Page 135, line 14. For *1703* read "1783."
Page 144. Under diagram read "Action of the Pedals in the Harp."
Page 152, line 9. For *black keys* read "black strings."
Page 157, line 9. Omit *Pavillon Chinois.*
Page 162, line 3*. For *Sully* read "Lully."
Page 163, title. After *G. Potter and Co.* add "Aldershot."
Page 167, title and line 3*. Omit *Pavillon Chinois* and see page 183.
Page 176. Above *title* insert "Chapter XXXIII."
Page 209. *Trombone* read "Alto in E flat (or in F, one tone higher.)"
Page 210. *Bass trombone* read "in F (in G, or double slide in E flat correspondingly higher or lower.)"

ADDENDA ET CORRIGENDA TO VOL. II.

PSALTER OF LOTHAIR. Page 373. This priceless Carlovingian MS., a product of the School of Metz, was known for some years as the "Ellis and White Psalter" until it passed into the hands of the late Sir Thomas Brooke, who recently bequeathed it to the British Museum. The ivory carving which adorns the binding is of later date (probably XIth century). The instrument which the artist has placed in the hands of King David may be found to throw some light on the provenance of the ivory carving; it has evidently been copied from the miniature representing King David and his musicians in the "Bible of Charles le Chauve," a masterpiece of the School of Tours, executed for Count Vivien for presentation to King Charles. The precious MS. (now in the Bibl. Nat., Paris), was passed on after the king's death to the city of Metz where it was preserved until the XVIIth century. That was, no doubt, how the ivory carver got his inspiration from the Bible of Charles the Bald; but he was not content to copy the instrument as he found it; he tried to turn it into a lyre, while preserving the fingerboard

which forms a characteristic feature of the chrotta or crwth; if the artist was working during the XIth century, as has been thought, the bow was at that date beginning to be applied to instruments of this type, whereas in the IXth century the crwth, as represented in the "Bible of Charles le Chauve," was still played by twanging the strings with the fingers.

PERSIAN TANBUR. Page 400, note. The Persians in the VIIIth century B.C., were using tanburs of both oval and pear-shaped types, which display a standard of development as high or higher than the Assyrian one here quoted. See Pl. XII, the two right hand figures.

VIOLS. Page 452. Bowed instruments with sloping shoulders displaying in their soundchests the structural features of the violin family, such as Fig. 174, became the characteristic instruments of the German Minnesingers and developed centuries later into the viols. The guitar-fiddle, on the other hand, developed in Italy, through the intermediary of the lyra family, directly into the violin. The lyra had the same outline as the violin, "ff" soundholes, bridge and fingerboard, differing only in the shape of the head which was flat and the number of strings (from seven to twelve.) See "Michael Praetorius de Organographia" (Part II of "Syntagma Musicum"), Wolfenbüttel, 1618, Pl. XVII (4) and XX (5.)

Page 226, Fig. 7. From the legend, delete "from an ornament on a Chasuble at Sens, 1165 A.D."
Page 233, Fig. 14. After *modern* insert "type."
Page 250, line 6*. A XIVth century crwth with bow is figured on a seal dated 1316. See Appendix, page 495.
Page 255, note. For *South Kensington Museum* read "Victoria and Albert Museum."
Page 258, Fig. 39. For *Guitar* read "Lute."
Page 264, line 1*. For *this tailpiece* read "the tailpiece."
Page 266, line 28. For *Lyre* read "Kithara."
Page 271, line 3. For *civilisation* read "civilisations."
Page 273, line 23. For *plectra* read "plectrum."
Page 275, line 17. For *ungalae* read "ungulae."
Page 283, Fig. 71. For *Musician's* read "Musicians'."
Page 284, under Fig. 74. For *14th cent.* read "15th cent."
Pages 290 and 293, under Figs. 80 and 87. For *Herculanum* read "Herculaneum."
Page 292, under Fig. 86. For *Musco* read "Museo."
Page 316, line 4*. For *Atheneus* read "Athenaeus."
Page 338, line 4*. For *(p. 42)* read "(p. 255.)"
Page 339, line 7*. For *Neuberg* read "Neuburg."
Page 347, under Fig. 122. For *Psalterium* read "Harp."
Page 358, note *, line 6. Transfer parenthesis from after *Delisle* to after "British Museum."
Page 358, note *, line 7. After *Janitschek* insert "and others."
Page 377, line 22. After *Kithara* insert ("or Kinyra.")
Page 384, line 11. Before *instruments* insert "stringed."
Page 401, line 2. This is an error. See Appendix C, page 494.
Page 405, line 3. For *lute* read "mandoline."
Page 408, note †. For *Firenz* read "Firenze."
Page 409, note ‡. For *Luteran* read "Lateran."
Page 415, lines 18-19. For *Suscinius* read "Luscinius."

Page 415, line 20. For *Martinus* read "Martinius."
Page 419, line 12. Delete "or gigue."
Page 455. In verse for *vuth* read "luth."
Page 456, line 5*. For *Giurault* read "Guirault."
Page 464, line 8. For *29* read "30."
Page 466, line 2*. For *articles* read "types."
Page 479, Fig. 203. Before *Guitar-fiddle* add "Tenor."
Page 488, note *. For *musician* read "musicians."
Page 496, note †. For *S. O. Westwood* read "J. O. Westwood."
Page 505, line 7. For *Von Christus* read "vor Christus."
Page 505, line 11*. Before *Buhle* insert "* * *."
Page 507. Before *Elson* insert "EISEL, J. F. Musicus Autodidaktos. Erfurt, 1738."
Page 509, lines 9-10. Delete "Gewandhaus Concert."
Page 512, line 13. For *Landes Kunde* read "Landeskunde."
Page 515, line 6. Delete "(the only copy in Gt. Britain is in the Advocates' Library, Edinburgh)."
Page 516, line 16. For *Museé* read "Musée."
Page 518, line 12*. For *Vitruela* read "Vihuela."
Page 521, line 25*. For *Museé* read "Musée."
Page 530, line 12*. In *1,700* omit the comma.
Page 531, lines 21-2*. Transfer to Section B, III, page 532.
Page 532, line 10. For *1900* read "1889."
Page 538, line 12. For *Clementini* read "Clementino."
Page 540, line 5. *Verschmetteten* read "verschuetteten."
Page 541, line 12. For *and* read "und."
Page 545, line 23. For *Monuments* read "Sculpture."
Page 557, line 10. For *Ewerbungen* read "Erwerbungen."
Page 560, line 23. For *Württembergischen* read "Würtembergischen."
Page 562, line 6. After *Grab* a "hyphen" instead of a dash.
Page 569, line 21. For *Mémories* read "Mémoires."
Page 571. Under *Section E* add "MANUSCRIPTS."
Page 578. Omitted from *Section A*. LAND, J. P. N. "Recherches sur l'histoire de la Gamme Arabe." *Intern. Orient. Congress, Leyden, 1883. Compte Rendu.* Part II, p. 100. Contains extracts in French from Al-Farabi's work.
Page 578, line 20. For *Evangelarium* read "Evangeliarium."
Page 596, line 17. For *Mittelalters* read "Mittelalter."

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